Vol. XLVIII Number 15

PUBLISHED WEEKLY AT 5 SOUTH WABASH AVENUE CHICAGO, OCTOBER 8, 1925

Thirty-five Cents a Copy Three Dollars a Year

# o build a product of honest value that the dealer can truthfully recommend to his trade

#### The Goodrich 10 points of profit

- A product of honest value.
- Marketing through dealers.
- Dealers of good standing.
- Safe and permanent supply.
- Dealer advertising support.
- Protection of Dealers established trade.
- A tire for every transportation need.
- Fair and competitive price schedule.
- Original equipment program with car manufacturers.
- Square deal in all transactions.

ERE is Point One of the Goodrich Sales Plan designed to foster and protect the interests of the tire merchant.

Mark well the word, honest. To make a product of honest value, a manufacturer must first intend that his product shall be the best, and then know how to make it the best. He must have the experience, skill, and resources to be able to do it.

Such a product, a tire merchant can recommend to his customers with the firm belief that it will make good, and bring them back for 'repeat' purchases.

Point One, the right and only right place for a tire manufacturer and tire merchant to begin, is worth knowing by heart; for it is the anchor stone of future, the safeguard of further dealing. Read carefully the other nine Goodrich Points of Profit. They outline the whole structure of a permanent and profitable business.

THE B. F. GOODRICH RUBBER COMPANY Established 1870 Akron, Ohio

Goodrich Tires "Best in the Long Run"

# Manley Garage Light

# Manley Spring Shackle Tool For Fords



Short days mean artificial lights in the late afternoons.

If you can place the light where you want it, you will use less current--you will accomplish the work in less time--be able to do a better job with less eye strain.

The Manley Garage Light can be adjusted to any position, from 6 inches from the floor to a height of 5 feet 6 inches. The light may be directed up, down or sideways to illuminate under a car, on the engine, or the arm may be extended through the window or door of a closed car for working on transmission or other work inside.

Complete with 25 feet of rubber covered cable, enamel lamp shade and guard, and extra built-in socket for plugging in an Electric Drill, Electric Valve Grinder, Electric Soldering Iron, etc.

It is particularly valuable for the wash rack, saving a battery of lights, because it may be swung around to illuminate the part being washed.





A prise pivotted on a bracket that slips over either front or rear axle of a Ford car. An old Ford axle shaft makes an ideal handle, or you can use a 1 inch pipe which merely slips into the socket like a Jack handle.

Works equally well on front or rear springs.

Eliminates the necessity for using a Jack and makes it easy to line up the spring hanger with the hole in the spring.

# Get a Manley

For descriptive bulletin, write to

Manley Mfg. Co. York, Pa.

Buy from your own Jobber.

# Franchise means Stability

Each passing year sees new motor car building organizations born and others die.

Whether your franchise is to be permanent and prosperous depends on the stability of the manufacturer.

On this basis the Buick franchise is more desirable than most. The momentum gained for Buick merchandise through more than 21 years of unparalleled success in manufacture cannot be disregarded.

# the Better BUICK

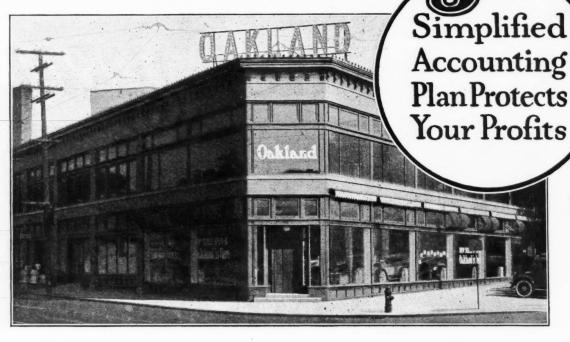
BUICK MOTOR COMPANY, FLINT, MICHIGAN

Division of General Motors Corporation

Pioneer Builders of Valve-in-Head Motor Cars Branches in All Principal Cities—Dealers Everywhere

WHEN BETTER AUTOMOBILES ARE BUILT, BUICK WILL BUILD THEM

Burroughs



### Every Day These Oakland Distributors Know Where Their Business Stands

"The Burroughs Simplified Accounting Plan gives us an accurate check on the value of our used cars. We are also using it on our accounts receivable, notes receivable and general ledg-

er. It saves us considerable time and gives us the data at the close of every day's business."

> -Tompkins Motor Sales Company, Saginaw, Michigan

Burroughs Adding Machine Co., 6429 Second Blvd., Detroit, Michigan.

Please send me the folder describing methods used by Mori Brothers Motor Co., Vineland, N. J.

Name .....

Addross

Thousands of automobile and accessory dealers use the Burroughs Simplified Accounting Plan. Phone our local office for free demonstration or mail coupon for folder describing methods used by Mori Brothers Motor Co., Hudson-Essex Dealers, Vineland, N. J.

BURROUGHS ADDING MACHINE COMPANY DETROIT, MICHIGAN

ADDING · BOOKKEEPING · CALCULATING AND BILLING MACHINES

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Vol XLVIII

No. 15

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Subscriptions accepted only from the Automotive Trade Entered as Second Class Matter, Sept. 19, 1899, at the Post Office at Chicago, Ill., under Act of March 6, 1879



#### BACKED BY 35 YEARS OF "KNOW-HOW"



WHY is it that the man who buys one Miller Bus is soon operating two or three, or four? Why is it that Miller owners refuse to "shop around" but come straight to headquarters for "another bus just like that last one?"

You can sum up the situation in a single word —confidence! Why guess and gamble—why

experiment—when you have a record of proved performance, that simply can't be beaten?

Here, then, is the biggest factor in the remarkable success that Miller is scoring. Confidence is the one element that can't be bought or bartered. It must be earned by ceaseless effort.

Write today for detailed specifications, and some mighty interesting facts and figures.

THE A. J. MILLER CO., BELLEFONTAINE, OHIO

October 8, 1925

# Selling the Public— on the Dealer as well as on the Car

THE SATURDAY EVENING POST

#### Fine One-Profit Studebakers

Worthily made - worthily sold

#### Pledge to the Public on Used Car Sales

1 All used cars offered to the public shall be honestly represented.

2 All Studebaker automobiles which are sold as CERTIFIED CARS have been properly reconditioned, and carry a 30day guarantee for replacement of defective parts and free service on adjustments.

3 Every used car is conspicuously marked with its price in plain figures, and that price, just as the price of our new cars, is rigidly maintained.

4 Every purchaser of a used car may drive it for five days, and then, if not satisfied for any reason, turn it back and apply the money paid as a credit on the purchase of any other car in stock—new or used.

It is assumed, of course, that the car has not been smalled up by collision or other arcident in the meantime.

Not only to the public, but also to The Studebaker Corporation of America, whose cars we sell, we pledge adherence to the above policy in selling used cars.

By Your Studebaker Dealer

THE best type of automobile dealers are the Studebaker Dealer's Pledge to the Public on Used Car Sales, which is reproduced on this page.

This best type of automobile dealers are the Studebaker Dealer's Pledge to the Public on Used Car Sales, which is reproduced on this page.

The best type of automobile dealers are the Studebaker Dealer's Pledge to the Public on Used Car Sales, which is reproduced on this page.

But beyond these matters of detail is the character of the merchant himself—friendly, the character of the factory service school at the factory s

The sound business basis upon which Studebaker dealers operate, their integrity and fair dealing, their confidence in the merit of Studebaker's fine One-Profit motor cars; all these are strikingly attested by

why it is only common sense to go to a

Studebaker dealer, whether you intend to
buy a new car or a used car.

Remember that every fine car you see on
the streets is a "used car." This pledge

The Studebaker dealer, one-profit Studebaker dealer, one-profit Studebaker dealer.



Out of every eight cars sold for more than one thousand dollars—one is a Studebaker. This is because buyers have considered these facts:

4 Studebaker's \$100,000,000 of net assets concentrated upon the production of one-profit Studebakers, guarantee owners that their cars will never become "orphaus."

you to buy with confidence and safety the "unused transportation" which is the essential element in every used car.

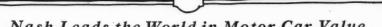
#### Friendly Service

Courtesy you may find in practically all automobile salesrooms, but the Studebaker dealer offers something more—friendliness. He maintains a stock of genuine Studebaker parts for all repairs. Usually he has tools specially made to save you time and money. Often his mechanics have been trained in the factory service school at South Bend.

square dealing—as evidenced by the "Used Car Pledge."

The Studebaker dealer organization and

THE STUDEBAKER CORPORATION OF AMERICA, SOUTH BEND, INDIANA



Nash Leads the World in Motor Car Value

# Over 21,000 Nash Cars Produced and Sold in August and September

# Over 5,000 Ajax Sixes Shipped So Far

No motor car merchant will fail to grasp the pointed significance of those two vital statements of fact.

Traveling right along with the phenomenal twelve months' upward sweep of Nash sales and production is the growing national rise in Ajax sales and production.

Just 4 months ago the first Ajax Six left the production line.

Last week Saturday, the 5,000th Ajax was shipped from the factory.

And now Ajax production has reached the rate of 30,000 cars annually —with plans completed to double this volume.

The net of it is for the man with a Nash contract greatly widened market, greatly increased number of prospects, greatly enlarged sales and, best of all, greatly heightened profits.

NASH

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# Centralized Pistons Gentralized Piston Ring Tension

piston

Ring

make for noise and wear.

The best of piston rings and pistons call for cushioning. They need a compensating third party—not to increase ring tension unnecessarily—but to centralize the pistons, equalize the piston ring tension and maintain the piston ring's elasticity.

Today the average car buyer is well educated through experience. He wants a quiet, powerful car that passes repair shops without hesitating. Let Ramcos help you meet the demand.

Samples Sent on Request

PATENTS

PENDING

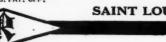
# RAMCO Cushion INNER RINGS

RAMSEY ACCESSORIES MFG. CORP.

REG. U. S. PAT. OFF.

SAINT LOUIS, MISSOURI







# POLICY

Chrysler enjoys the friendship as well as the business support of its dealers because the Chrysler dealer policy is fair. This is among the important factors which have made the Chrysler franchise desired by the country's soundest and shrewdest motor car merchandisers. Chrysler is not merely theoretically aware that its success is predicated on the success of its dealers; but every dealer policy, whether it pertains to sales, advertising, production, parts, service or accounting, is recognition in fact of this important truth. Write or talk to Chrysler dealers about our relations with them. Their good will, confidence and loyalty are sound reasons why you should investigate the possibility of a Chrysler franchise at once. Your application will be treated in strictest confidence.

No. 1—Profit No. 2—Product No. 3—Sales Features

No. 4-Policy

A notable product, high quality, obvious value, factory co-operation, liberal policies, high resale value—these are the fundamentals of a successful and profitable dealership. Watch for the Chrysler comments on these all-important phases of your business. This is the fourth of a series of important messages whose titles appear in the margin. Those which have gone before are well worth your reading. We will gladly send you copies of the entire series to date.

CHRYSLER SALES CORPORATION, DETROIT, MICH. CHRYSLER CORPORATION OF CANADA, LIMITED, WINDSOR, ONTARIO

# CHRYSLER SIX ~ FOUR

925

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Summary and Index of Important Events in

#### This Week's Automotive News

Detailed Stories from MOTOR AGE Staff Writers and Special Correspondents Appear in News Section Beginning on Page 32

States. Exports show decided gain and dealers are meeting used car situation satisfactorily. Page 32.

Kissel announces price reductions on various models ranging from \$100 to \$200. Page 32.

New Hupmobile six at popular price to be soon announced. Page 32.

Head of Moon-Diana Company is enthused over foreign trade outlook. Page 34.

Third quarter output by Stutz is more than double that for all of 1924. Page 35.

Percy Owen joins Dodge Brothers as director of foreign sales. Page 35.

Daily auction will be feature of Chicago used car exhibit. Page 35.

Automotive exports show big increase during first half of 1925. Page 33.

Classics of custom coachwork to be on exhibition in New York Nov. 15-23. Page 33.

Growth of rubber industry is reflected in new buildings. Page 34.

Effect of reduced prices for new passenger cars begins to be felt in stimulating way at Louisville, Ky. Page 43.

Demand for rebuilt used cars in California increased to point making it almost impossible to sell "as is" vehicles. Page 39.

Drouth fails to halt good progress of business in the Southeast. Unfilled orders accumulate. Page 42.

Second Annual Closed Car Salon by dealers in Los Angeles now under way. Page 38.

New car registrations in Indiana dropped 15 per cent in August as compared with July. Page 38.

Ajax to meet demand of market with factory extensions that will double present capacity. Page 38.

Report from Akron says sales of balloon casings so far this year have been more than double those of 1924. Page 37.

Many buyers on waiting lists in Texas, dealers being from 100 to 200 days behind on deliveries. Page 37.

Ford weekly purchase enrollments greatly increased by stimulus of new methods. Page 37.

General Motors announces plans for new light six priced between Chevrolet and Oldsmobile. Page 36.

Last half of year running ahead of first half for trade in Milwaukee. Page 36.

In Next Week's Issue-How to Build a Miniature Car

# A Practical Trade Association Program

#### Member



The Automotive Trades Association demands that members use every honorable means to uphold the dignity and honor of his vocation, to exalt its standards, to extend its spirit of usefulness and shall regard themselves as being engaged in a business in which there is a well defined duty towards the public and themselves.

Efficient Service and Skillful Workmanship Courteous Treatment.

#### How Various Service Agencies in Kansas City Have Brought About Closer Cooperation Resulting in More Profit to Themselves and Greater Satisfaction to Customers

By BEN S. BROWN

THE economic justification for the existence of an automotive trades association lies in the fact that it enables its members to make more money and to render better service to the public.

At least, that is the opinion of George W. Arnold, president of the Kansas City, Mo., Automotive Trades Association. And working out this idea, the membership of this association has doubled in the past eight months, and bids fair to make another increase of fifty per cent before the year closes.

Mr. Arnold was one of the organizers of the Kansas City Garage Association, the predecessor of the present organization. He has been closely allied with the institution since its first meeting, either as an officer, or a director, or as a working member. He has had a great deal to do with its development. At the beginning of the present year he became the president of the new organization and it is growing in membership and what is more important, in influence and effectiveness as the months go by.

As Mr. Arnold is an eminently practical business man, he insists that an association of business men, even in its social features, should be practical, and be conducted in a businesslike manner. Hence it is not to be wondered at that this association is doing work which is at once efficient in its service to the public and successful in increasing the net profits of its membership.

It is a little difficult to give an accurate outline of the program of this association, for the reason that it is constantly changing—broadening—extending its scope and elevating its ideals. It began with the idea of increasing profits for its members; now it stresses the service it is to render the public, and it is finding that this is the only sure way of making more money for its members.

Starting with these ideals, the program, which is

worked out in a tentative form, and will soon be put into a definite one for the guidance of the members and the information of the public, includes the following items:

1. Improvement of the members—This is fundamental, and is recognized as the first thing to be done. The making better workers and merchants out of the membership means that they will deserve more pay, and the management of the association is certain that the members will get the better returns for their work just as rapidly as they deserve them. Then the first problem is, How can we get our members to be WORTH more money to the community? The method which is worked out for the accomplishment of this end may be stated in a single word—Education.

2. Improvement in the Garages—This refers to the buildings themselves. It is insisted that attractive appearing houses will invite trade. Clean garages are not only inviting, but are money-making, in that they reduce the risk of loss by fire, and tend to reduce the cost of insurance. Better lighting systems and other items which improve the working conditions, increase production and thus reduce the cost of doing business. To improve the garages means more money in the pockets of the membership.

3. Improve the shop equipment—It is recognized that poor tools are costly at any price, and that labor-saving tools and those which are especially adapted to the work to be done are money-makers. This being true, the association insists that in order to become a member of the association at all the garage be equipped with a collection of tools which will enable the worker to do good work at a reasonable rate, and make a profit on the jobs.

4. Improve the Mechanics—In the past, the rapid development of the automotive business, and the fact that anybody who had even a rudimentary knowledge of tools

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and their uses could "get by" in the business has invited many incompetent men into the industry. But the public demands a higher class of workmanship now, and it is to the interest of the garage man to furnish the best possible.

5. Give better service to the customer—This is in addition to the work of the mechanic. There is need for better merchandising and service in every department in the business. As the customer is getting it in other departments of the automobile business, he is demanding it from the trades. It is the business of the association to develop the service for the customer.

6. Standardize the service which is to be rendered to the public—The garage men themselves need to know just what service is to be rendered free, for instance. Air? Water for radiator? What? And when the services are rendered, a standardizing of prices based on the cost of the service, and the overhead cost of doing business. Also, an understanding as to just what is included in certain services to the customer.

7. The use by the garages of cost finding and accounting systems which will enable the garage man to know when he is doing business at a loss or at a profit—This is a protection to himself, and an assurance that the customer will receive his service at a reasonable price—not paying too much for one job, and too little for another. It is the only way by which a garage can be sure that it will be able to continue to do business at all.

8. The operation of a credit system by the association for the benefit of the members which will enable them to collect past-due bills, and to meet the encroachments of the dead beats which infest every community—This reduces cost to the honest customer, and makes money for the members of the association.

9. To advertise to the public that certain garages are association members, and thus guaranteeing to the prospective customer that in this garage he will find good service, courteous treatment and fair prices.

10. To secure by cooperation the enactment and enforcement of laws and ordinances which will promote the welfare of the trade and benefit the public.

The idea of expansion which controls the management of the work is shown in the change in the name of the association, made some time ago. It was originally called the Kansas City Garage Association. It became evident that if the garage men were to get the most out of the business for themselves, it would be by association with the other members of the trade. In order to include these other concerns, the name was changed to The Kansas City

A trade association starts out to help its individual members make more money for themselves.

It sees a chance to develop better service to the public by fuller cooperation.

It broadens its membership, helps other organizations, and secures cooperation from other bodies in furthering the welfare of the community.

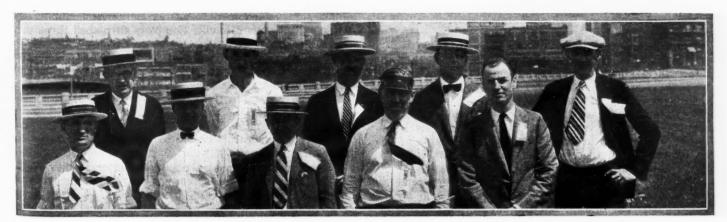
By working out a program of service and forgetting immediate profit, the members find that they are making more money than ever.

The individual business of the association's president illustrates the principles that the association is promoting—and shows how practical they are.

Automotive Trades Association. The members have been classified for work in the association into the following departments, which show the present classes of automotive men now included in its membership:

- 1. Garage and Repair Men.
- 2. Parts and Accessory Men.
- 3. Radiator and Fender Men.
- 4. Battery and Electrical Men.
- 5. Refinishing, Paint and Top Men.
- 6. Machinists.

In addition to these there has been recently made a way by which the jobbers have been admitted to membership. It was felt that the jobbers could greatly help the trades to understand many of the problems which confront them; and that it would be to the advantage of the trades to get the jobbers in touch with them so that they in turn could learn first hand how better to meet the needs of the trades. In a recent monthly meeting of the association both of these ends were realized. A jobber came to tell the members of the trades how to merchandise parts, and he gave some very valuable information. The address was followed by a discussion which centered about the problems connected with the trades meeting the demands of the public for quick service, and



Association program includes brake testing to increase business. This is the group that put the program over in Kansas City. Left to right, front row: George W. Arnold, president of Automotive Trades Association; Carlton Robb, secretary of the association; George Lockridge, Kansas City Auto Supply Co.; Ira Wilkinson, Raybestos Mfg. Co.; Ed Stewart of Trades Association; back row: Julien Harvey, director of Safety Council; Ray Barnett of the Safety Council staff; R. N. Stroup, H. S. Traine and W. M. Hackett of Johns Manville Co.

Most of the points in this program have been tried out by the Kansas City Automotive Trades Association to such an extent that it can vouch for the effectiveness of the plans in making money for the members, but some of them are just being introduced. While this is true, the successful operation of the Keystone Garage, owned by the president of the association, along the lines indicated is considered a demonstration of their practicability. Indeed, Mr. Arnold states that the adherence to this program has been the secret of his success, and the growth of his business may be taken as a typical example of the beneficial effects of such trade association activities. The story of how Mr. Arnold applied these principles to his own business will be told in an early issue of Motor Age.

the jobber was told in no uncertain language of the needs of the trades which grew out of the urgent demands of the public; then suggestions were made as to how these needs might be the better met on the part of the jobber.

The fundamental working idea of the association is that these desired ends are to be secured by education, and not by legislation. Most men will not be told by others what they must do, or ought to do, but will be glad to adopt and adapt suggestions which are made to them as to what they might do. Working on this basis, the association does not presume to tell the different departments how they are to work out their problems, but a meeting of this particular group is called, and the questions involved are discussed, and maybe a committee of members of the group appointed to investigate and report. Or they may decide to invite an expert on the particular problem to address the group. But whatever the method of procedure, the purpose is to get before the members the facts in the case, and to put up to them the responsibility of deciding what they will do in the matter.

It is usual for the group to make no formal ruling in the matter, but after the discussion, come to some understanding as to what it will be well to do, and yet leave each member to work out the solution of his problem as he sees fit, or to leave it unsolved if he shall so choose. The position taken is that it will be impossible to drive all the members into accepting the findings of the majority, and it is better to leave each free to accept and put into operation such parts of the better plans discovered by the conference as his conditions seem to warrant, hoping that with changing conditions all of the members will ultimately adopt and put into operation the methods of the best.

Many of the problems which arise are such that they affect all members of the association. In such a case, it is the policy to have these discussed at the regular monthly meeting of the associations. There is no difficulty in getting an expert to tell of these matters, for the factories usually have men who have made a special study of the subject, and are skilled in the presentation of it to an audience, and these will be sent on request with no financial obligation on the part of the association.

Recently a representative of a brake factory came and told how to merchandise brake linings. He did not say how to sell HIS brakes, but the suggestions were applicable to any and all brakes, and what he said was of benefit to every member of the association. On another occasion motion pictures illustrated how spark plugs were made, and how they were to be repaired; and other interesting and valuable information concerning them was presented. Hydraulic brakes was the subject of another

lecture. At another meeting the topic was "Lubrication—How to Sell It."

To create a favorable attitude on the part of the membership, the meetings are opened with a dinner, and to leave a pleasant recollection of the event, the program closes with an entertainment of some sort. Added to these monthly meetings are special social events, the primary purpose of which is to promote good fellowship, and to get the members to realize that they are all friendly cooperators in the big job of keeping the cars of the public running satisfactorily, and not rivals who will prosper in proportion as they cut one another's throats, or tear down one another's business. Indeed, the theory on which they work, and the idea constantly stressed is that their real competitors are the men in other lines of business who are trying to get the money that should legitimately go into the tills of the members of the automotive trades.

The manner in which the association is attempting to educate the public, and how these attempts result in increased business for the trades, is illustrated by Better Brakes Week, which was held in June of the present year.

The idea of holding brake test week in Kansas City was first presented to the association by President Arnold. The cooperation of the Johns Manville Company was secured, and the district manager, H. L. Faust, manager of the automobile department for this district, gave every assistance possible in promoting the scheme. At his suggestion the Safety Council of Kansas City was asked to join in putting over the "Week" in a big way.

In conjunction with the Safety Council the cooperation of the Police Department of the city was secured, and it helped in advertising the event, passing out 5,000 steering-post cards to motorists, and furnishing police protection at all the Test Stations during the week.

The Park Board gave permission to use certain streets for the test—in fact these streets were closed for traffic and dedicated to the tests during the whole week. The Board further assisted by placing twelve large signs on the boulevards directing motorists to the test stations.

Through the Safety Council several men from the garages of the public utilities were secured to help at the stations. Also, the council was helpful in securing press publicity, and mailed out from its office several thousand letters and posters announcing the tests.

#### Jobbers Furnish Clerks

The men for the operating detail were drawn from the membership of the Automotive Trades Association, principally, although a few men were obtained from the Ford agencies and other dealers. Each of the principal supply jobbers furnished men to act as clerks, etc., during the week. The Johns Manville Company furnished three men for the entire week.

President Arnold, Secretary Stewart and Executive Secretary Robb, of the association, were on the job throughout the entire week. During the week, President Arnold gave a radio talk, which was broadcasted by the Kansas City Star.

As a result of the Better Brakes Week on trade, President Arnold made this report to the association members at a later meeting:

"Business picks up as a result of Better Brakes Week. My own shop shows an increase of over \$50 a day over last month, of which the most is brake work. I know absolutely of at least a dozen cars of my customers that were sold re-line jobs as a direct result of the brake test, also of a number of other jobs that were driven in for brake service. Our average re-lines per day now are from three to five, where last month the average was about one a day. I have sold other work also as a result of the tests.

(Continued on page 18)

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# Safety Experts See Hopeful Traffic Signs

Spirit of Optimism for Solution of Motor Vehicle Problem on Streets and Highways Pervades National Safety Congress

By SAM SHELTON

ALTHOUGH the prevention of motor vehicle accidents on streets and highways continues to be one of the chief concerns of safety organizations everywhere, there was a distinct hopefulness displayed at the Fourteenth National Safety Congress at Cleveland that better traffic conditions are on the way which should result in an improvement in the accident ratio. The congress opened Monday, Sept. 28 and continued throughout the week.

Confidence and conviction on the part of the public that the traffic problem can be solved has taken the place of the despair and hopelessness that seemed to surround this subject a few years ago, in the opinion of Thomas P. Henry, president of the American Automobile Association, whose paper on Safety and the Auto-

mobile was read before the Public Safety section of the Congress. This is the basis of Mr. Henry's optimism. An aroused popular interest in the problem and definite progress by public agencies in relieving traffic

congestions were the grounds upon which Col. A. B. Barber of Washington, D. C., based his hopefulness. Col. Barber, who delivered an address at one of the sessions and entered into the discussions, is a director of the National Conference on Street and Highway Safety, the organization formed by the Hoover committee on safety.

Aroused public opinion apparently is working in two directions, according to the views and reports of various officials and safety experts at the convention. One is toward the comprehensive and uniform regulation of traffic throughout the United States and the other is toward providing better and more modern physical facilities to carry the traffic.

On the point of more comprehensive and uniform regulation the Congress went on record through the adoption of a resolution favoring the licensing of drivers, "whose qualifications to operate motor vehicles shall have been determined by mental tests and practical demonstrations conducted by competent and honest examiners." The revocation or suspension of such licenses should be provided for, the resolution stated.

Another resolution stated: "It is important that uniform traffic regulations shall be formulated and adopted. Traffic movement should be considered as a state and local problem of engineering importance."

#### Uniform System of Marking

An important step taken by the Bureau of Public roads looking toward uniformity of traffic conditions was announced by E. W. James, chief of the division of design of the bureau. This was the adoption by the joint committee appointed by the Secretary of Agriculture of a uniform system of marking United States highways throughout their length in as many states as they may



Edward S. Jordan, president Jordan Motor Car Co., who addressed National Safety Congress on "The Automobile and Safety"

pass through. This committee has designated certain interstate highways in the Federal Aid system as United States Highways and these roads are to carry the same numbers and uniform markings from beginning to end.

For marking these roads Mr. James' department has designed a completely standardized set of number plates. direction and distance signs and warning signals. The warning signals designate curves and turns, schools, railway crossings, hills and the like. Each signal has a distinctive shape and symbol in addition to the word, "turn," "hill," or other instructional word. It was the sense of the Safety Congress that the universal adoption of these markers on all state highways would be a great help to safety because drivers would soon learn to recognize their mean-

ing at a glance.

It was felt, also, that uniformity in this respect would pave the way for certain other standardization in both traffic rules and road design that would be of tremendous value to all motorists and incidentally to the automotive industry.

Mr. Barber stated that at the next meeting of the National Conference on Street and Highway Safety, which probably will be held in December, the commission of the various states on uniform laws will submit proposed legislation to bring about uniformity in the United States in the registration of motor vehicles, the licensing of drivers and the use of roads.

#### Tendency to Widen Roads

Some of the physical improvements which are rapidly being worked out to facilitate traffic, especially in and near the large cities where congestion has been at its worst, were mentioned by Mr. Henry. Among these were the widening of intersections, rounding of corners, repaving of streets not now used because of poor pavement and elimination of grade crossings. Mr. Henry also mentioned the tendency to build new roads and streets wider and widen old ones wherever possible.

Frank F. Rogers, State Highway Commissioner of Michigan, told how that state is building a great boulevard with two 40-foot roadways between Detroit and Pontiac. He showed lantern slides depicting the progress of this great enterprise. Other lantern slides showed the methods generally used now to build paved roads with sufficient right of way and grade to enable widening to at least double capacity when traffic demands.

Means of avoiding motor vehicle and highway accidents were discussed by speakers of national prominence, among them being Rear Admiral William S. Sims of the United States Navy; John Barton Payne, chairman of the Central Committee of the American Red Cross, and Edward S. Jordan, president of the Jordan Motor Car Co.

(Continued on Page 18)

# Bamford Rebuilds Instead of Repairing



Walter Bamford in his working clothes. His chief assistant is at the left

OME years ago, a young garage owner at Colo, Iowa, read an article in Motor Age on the subject of motor reconditioning. The writer pointed out the possibilities for profit in the rebuilding business, making the statement that the majority of cars brought in for overhaul should be rebuilt rather than repaired. Walter Bamford, the garage man, thoroughly agreed with the writer. Car owners around Colo are average car owners. They like to instruct the mechanic as to the repairs or adjustments to be made on their cars and they howl just as loud as the average owner, when the car fails to perform after the "cobbling" is finished.

The war came to interrupt Mr. Bamford's plans, but he parked the reconditioning idea in the back of his head, determined that some time he would operate a shop which catered to "complete"—and satisfactory—reconditioning service. But when he returned from service, he found that his plans for equipping an up-to-date shop must wait. His garage business was "shot." He hustled out and obtained a job as a mechanic. Little by little, he saved from his wages, laying by as much as possible each month. Early last year he decided that his savings amounted to enough to obtain the necessary equipment for his shop. He returned to Colo and looked around for a location.

#### And Three Other Garages

Good citizens of Colo, Iowa, might be indignant if it were inferred that their city is not large from the standpoint of either population or business possibilities. But figures are figures. A late census of Colo gives the population as 507. Three other garages were doing business

Car Owners Can't Buy Make-Shift Jobs or Superficial Repairs in This Successful Small Town Garage—\$5 Offer for Dissatisfied Customer Goes Begging

By LOWELL R. BUTCHER

in Colo when Mr. Bamford decided to locate his reconditioning shop in his home town. Well-meaning friends shook their heads. Shortly after the first of last year the shop was equipped for business.

From the very first, its proprietor made it plain to the public that he did not cater to ordinary overhaul and repair work. He refuses flatly to take any job when the owner persists in outlining the work to be done. Perhaps we should not say he makes a flat refusal, for he is diplomatic. He "sells" the idea that it is possible only to turn out a satisfactory job when he is allowed to do a complete job. He points out that a smoothly working engine is possible only when every part is correctly fitted and functioning 100 per cent. He will not stake his reputation as a mechanic on a job when the owner dictates the amount of work to be done or specifies the parts to be replaced. He makes estimates but he will not bid on work.

#### Satisfied Customers Bring Business

It took some time for the idea to "take" among the automobile owners in the vicinity of Colo. A few satisfactory jobs and more customers came. By the latter part of 1924 Mr. Bamford and his one helper were flooded with work. During the first six months of 1925, the shop turned out twenty-six reconditioning jobs; jobs that cost from \$100 to \$400 each, averaging better than \$200. The twenty-six jobs were drawn in from a radius of 100 miles of Colo. One satisfactory job has sold another. The ring of satisfied customers is constantly growing and enlarging.

Most of the reconditioning work is done on the engine. Mr. Bamford finds that the engine will require rebuilding before the chassis needs adjustment. The engine rebuilding is carried through in an orderly way. The first step is to pull the engine and disassemble. The starting motor and the generator are checked, rebuilt and laid aside. The next step is to check every bearing point of the motor, noting what parts need refinishing or replace-



Where Bamford rebuilds automobiles. This garage in a town of 500 population gets all the work it can do

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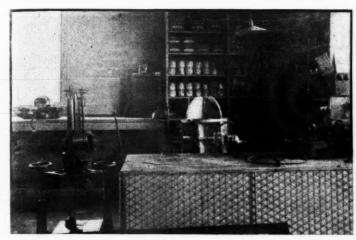
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These two photographs show some of the equipment used in Walter Bamford rebuilding shop. Bamford makes costly equipment pay by charging a flat service fee on machine operations in addition to the regular hourly labor charge

ment. The clutch is disassembled and inspected. If the clutch bearings betray wear they are replaced. The clutch lining is almost always replaced.

The engine itself, comes in for a complete rebuilding. Cylinders are reground and fitted with new rings and pistons. Valves are reseated and refaced. Connecting rods are rebabbited and reamed to a bearing fit. If a check of the crankshaft shows that it is to the slightest degree out of round, the shaft is reground. Precision measuring instruments are *used*. After the valves are refaced and reseated, every chatter mark is removed by grinding. Insofar as tools and expert workmanship can do it, the reconditioning work is of a high order.

Since almost every kind and variety of car is brought in for work, and it is almost impossible to forecast the amount of work necessary to put any particular job in first class condition, this garageman does not make flat rate charges for his work. He charges \$1 an hour for the work done on the car. He augments this charge by a service charge for the use of certain machines in his shop. On a cylinder regrind, he charges a \$10 service fee for the use of his regrinding machine and \$1 an hour for operating it. Valves are refaced for 15 cents apiece, plus labor at \$1 an hour.

#### Sells Idea of Equipment

By this system of making charges, Mr. Bramford "sells" the idea of his equipment to the public. Customers who would regard a higher hourly charge as excessive are perfectly willing to pay the \$1 hourly rate plus service charges on certain expensive machines.

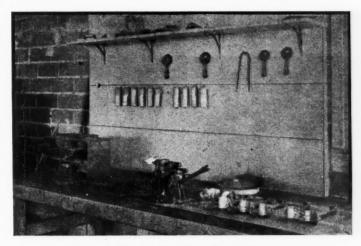
The Bamford shop lacks little in the way of rebuilding equipment. A list of the more important equipment follows:

Cylinder Regrinder
Cylinder Hone
Valve Refacing Machine
Valve Reseating Tools
Babbitting Machine
Bearing Boring Machine
Press with Jig for straightening Crankshafts
Piston Alignment Gage
Piston Vise
Flexible Shaft Buffer
Drill Press
Brake Lining Machine

Aside from the tools and equipment listed, the shop abounds in good hand tools. Mr. Bamford believes that first class work cannot be turned out with poor equipment. His equipment would do credit to shops in large cities, but he is not yet satisfied. As his business expands, he intends to add other machinery to his shop.

The rapidly growing business is an indication of the satisfaction which this shop's work is giving. When a reconditioned car leaves his shop, the proprietor does not regard his responsibility as ended. He is careful to impress the owner that a reconditioned car must be carefully handled at first. A sticker, which he places on the windshield, warns the car owner that the car should not be driven over 25 miles an hour during the first 500 miles. The owner is cautioned to use oil in the gasoline until the motor is "broken in." When the car has been driven 2,000 miles, it is brought in for a complete inspection.

Mr. Bamford refuses to take many jobs. Where the general condition of the car does not justify reconditioning, he is frank in telling the customer. He accepts only the jobs where the owner will receive full value for the money spent in re-conditioning. Not every car, he claims, is worth rebuilding. When he feels that he cannot recondition a car so that the owner will be thoroughly satisfied, he will not accept the work. Mr. Bamford has a standing offer of \$5 for anyone who will produce a dissatisfied customer. So far, not one has been produced.



The rebabbitting bench in Bamford's shop

#### Ten Turnovers a Year



No. 4. Special glass show case

Accessory Department in San Francisco Car Agency Does Approximately \$15,000 Worth of Business Monthly on a \$20,000 Stock.



No. 3. Special portable cabinet

FEW years ago the Chester N. Weaver Company (Studebaker dealer in San Francisco) started an accessory department on a very small scale which now does approximately \$15,000 worth of business monthly on a \$20,000 stock. There are approximately ten turnovers yearly.

The accessory department is in charge of N. W. Gordan (shown in photo No. 1) who has one assistant, Mr. Harris (shown in photo No. 2). The cooperation of all salesmen has been obtained by giving them a commission of 5 per cent on business that they are directly responsible for, thus they become sufficiently interested to bring many possible customers to Mr. Gordan or Mr. Harris. Even service men never overlook an opportunity to inform Mr. Gordan or Mr. Harris of possible customers, for they make  $2\frac{1}{2}$  per cent on business that they are directly responsible for.

Photograph No. 3 shows a special portable cabinet that Mr. Gordan has built, the top section of which is used for carrying bulbs. There are eight shelves for carrying the bulbs each shelf accommodating 56 bulbs. Holes are drilled in the shelves into which the end of the bulb is inserted keeping bulbs about an inch apart so they do not become broken or mixed. On the top of this cabinet is a whistle. In the lower part of the cabinet there are twelve drawers for minor accessories for automobiles such as gages, valve caps, horn equipment, small flash light, etc.

In photo No. 4 there is shown a cabinet consisting of 42 drawers, built along the wall, for carrying such articles as tape, tire valves, cut-out valves, screw drivers, certifi-

cate holders, pedal pads, spot lights, grease guns, flash lights, clocks, small oil cans, bumper parts, etc.

In front of the cabinet just described is a special glass show case in which are displayed cut glass vases, cigar lighters, ash trays and beautiful hand bags and vanity cases. Directly across from this case there have been arranged wicker chairs and writing desk for the use of women while they are waiting for their automobile to be released. Thus their attention is forcefully called to the ornaments in this show case. On the top of this case there are various types of trumpets and horns and an exhaust horn, which can be demonstrated by an attendant.

Photo No. 2 shows a number of special cabinets, the one at the left carrying polish, etc. Weed chains are carried on a counter extending between the two cabinets arranged along the end of the room. In the foreground and resting on the floor there can be seen a special pyramid for carrying accessories including camping stove, thermalware, spot light, tow-rope, canteens for water, oil and gasoline, camp chairs, etc. This pyramid can carry and and display more articles than if they were merely placed on the floor.

Photo No. 1 shows the tire rack at the left and in the center is a glass floor show case in which there are carried over 200 different styles, kinds and sizes of ornaments for motor cars such as agate balls for shifting levers, foot pedals, clocks, spot lights, etc. At the right of this case can be seen a counter that serves to divide the business section of the office from the accessory store proper, and at the same time acts as a display stand for oils and greases.



No. 1. Part of accessory department

No. 2. A number of special cabinets

# Oklahoma Dealers Boost Sales With Comic Strip Advertising Stunt

TF you want business-advertise!

If you want your advertising to make business, make

the public read your advertisements.

These, in a few words, are the two central thoughts of the creed of A. E. Kull, manager of the bus department of the Shelburne Motor Company, wholesale and retail agents for Reo and Hupmobile automobiles, trucks and buses in Oklahoma City. Upon them, through his many years in business in Oklahoma, Mr. Kull has built success and found for himself a place in the minds of newspaper and magazine readers.

A few months ago there appeared in the columns of cocky conduct of Hi-Power Colling, another salesman. Ro The Oklahoma City Times a striking novelty. It was a Fasken and Claude Eichor do their stuff like old 'vet feature in the advertising sections, a little square cartoon, and are better known. As a result, all of these men are

something like the usual run of comics newspaper readers are familiar with, but, in fact, something decidedly different. It caused a stir of comment among readers and among advertising men, as well.

This little cartoon announced that hereafter Shelburne's salesmen would do their "daily dozen" in a comic strip, instead of in the solemn terms of quarter-page and half-page advertisements, decorated with fancy borders and set in special faces of type.

In other words, Mr. Kull decided that if the dignity were taken out of the advertisements of his company and a warm, intimate touch substituted, his company would profit.

Old advertisers who look at their ledgers and see the expenses running far into five figures smiled complacently at the new idea.

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But orders have been attesting to the efficacy of the new departure.

"Our cartoons, which to a large extent have taken the place of conventional advertising," said Mr. Kull," now are attracting state-wide interest and are carrying our name and our message into places we never could have reached before. We make friends through the advertising and those friends do not forget us when they want a passenger car, a speed wagon,

a truck or a bus. They know us, and if advertising will not do that for a firm then what is it doing?

"When we began the cartoons we figured this way: If our salesmen could appear in a comic strip every day and if the strip could be made funny enough to create a following for itself, it would introduce Shelburne's salesmen to everybody in Oklahoma City. We only hoped for that, at first, but we got state interest to boot.

"Instead of being ordinary automobile salesmen they would become outstanding characters in the community, they would become talked about and laughed at, too, for that matter, but they would be 'somebodies.'

"Then there was still another angle. If a prominent citizen could be brought into the picture each day in a friendly way, or some item of local interest included, that prominent citizen would be pleased, and  $\epsilon$  ach prominent

citizen has at least a hundred close friends who would be pleased which, when reduced to a common denominator, simply spells this: In three hundred days you will have pleased and amused 300,000 people, people who feel a real, personal interest in the performing characters.

"In addition to this, thousands of others are interested

and amused because of the local application.

"After a three months trial we find that folks in all parts of the state have become intensely interested in Doc Johnson's 'prospect hound,' which was introduced as a character early in the life of the strip, as well as in the cocky conduct of Hi-Power Colling, another salesman. Roy Fasken and Claude Eichor do their stuff like old 'vets' and are better known. As a result all of these more are

#### SHELBURNE'S SALESMEN

.. BY METCALF



Specimen cartoon used by the Shelburne Motor Co. for advertising purposes

better salesmen than they ever have been."

Mr. Kull had a good chance to find out just what his comics are doing a few weeks ago. He headed a "Reo Circus," made up of a train of Reo buses and trucks, which covered a large part of Oklahoma, and everywhere he went he found the name of his company and the names of his salesmen were familiar. They were received like notables in many towns and cities. All because they were advertised unconventionally, in a friendly, intimate, sort of a way, just as "folks," with all the aloofness and dignity stripped off.

It is the firm belief of Mr. Kull that the cartoon got crowds for that sales strip when full page advance advertisements in the newspapers of every city visited would not have brought out a baker's dozen to see a parade of motor trucks and automobiles.

#### A Practical Trade Association Program

(Continued from page 12)

This increase in sales and service on brakes was felt throughout this territory.

The association, however, does not content itself with simply telling and showing its members the better ways, but makes a definite effort to train them in doing the things which make for success. For instance, it believes that it is essential to success for the garage man to be a merchant as well as a mechanic. In case he does not understand the science of cost finding and accounting, a man who is expert in the matter is sent to him, and he is taught how to apply these things to his business. A cost finding system is installed, and he is taught how to use it, and at stated periods, the accountant visits his place of business to see that he is operating it correctly. So also in the matter of credits. He is helped not only to collect his past-due accounts, but is induced to cooperate with the association credit department in such a way that not only he, but also other members of the association are protected against the dead-beat, and the man who runs bills with one firm as long as he can and then turns to another when he cannot get any more credit with the first.

In the matter of shop equipment it is necessary, as has been stated, that the applicant for membership have a certain amount before he will be admitted to the association at all. After he is in, the conferences which are held in his department tend to make every member appreciate the necessity of having better tools, and pride, if nothing else, will induce him to keep pace with his fellows.

In other things better understandings are being had, and standards are being raised. Bad practices are being eliminated, and better methods are being introduced. Uniform customs are preventing the man who wants for nothing all kind of accommodations, which are really services, from imposing on the association men, and compelling him to pay a fair price for what he gets. The raising of standards of service and work is weeding out the incompetent and indifferent, and assuring the public of a quality of work that it can rely upon, and which is well worth the price asked for it.

In return for this privilege of supervision by the association the member receives in return the endorsement of the association. This is given in the form of a membership card, which bears the seal of the association printed on it.

Along with this membership card, which is to be hung in a conspicuous place, goes a window sign, which is to be transferred to the glass where it may be seen by all who pass in front of the garage. This sign is in blue and gold. It is the ambition of the association to make this the recognized guarantee of good service and fair and courteous treatment, so that the member will receive the benefits which come with the confidence of the public, and the public shall have the satisfaction of knowing that in an establishment with this sign on it he will find a guaranteed service which will meet his every need. It will stand in pretty much the same place as the trade mark of a nationally advertised article in any line of business.

#### Safety Experts See Hopeful Traffic Signs

(Continued from page 13)

All of these speakers emphasized the importance of educating automobile drivers and the whole public in the hazards of the streets and highways and how to avoid them. It was agreed this education should begin in the home and be continued through schools, churches, factories and other places where people gather. It was the opinion of Thomas P. Henry that through constant drilling a safety instinct can be developed that can be depended upon to keep the great majority of persons out of trouble on the highways.

The motor vehicle has been made so safe in its design and construction that rarely is an accident attributable to any defect in the vehicle itself, Mr. Jordan said. In his opinion the most important safety factors in driving are brakes, steering mechanism, the driver, vision and lights. Other important factors are ample power, cast of shifting gears and sturdy wheels. The congestion of traffic on main highways near large cities on Sundays and holidays causes a great many accidents, he said.

The relation between law enforcement and safety was discussed by Judge Alva R. Corlett of the Municipal Court of Cleveland. Judge Corlett cited figures to prove his contention that when traffic violators are dealt with leniently fatal motor vehicle accidents increase, and that when stern justice is meted out the deaths on the highways are fewer.

The statistical committee of the National Safety Council made its report, estimating that there were nearly 85,000 deaths from fatal accidents in the United States in 1924. The committee reported that during the year there were not less than 17,400 deaths in motor vehicle accidents, not counting the accidents which involved railroad trains and street cars with automobiles. If these and motorcycle accidents were included, the committee estimated

the total would reach 20,000.

The first results were given of the Safety Council's effort to have a uniform system of reporting accidents adopted. Following last year's Safety Congress the Committee on Public Accident Statistics developed an accident reporting system and recommended its general use. Suggested record forms were drawn up and submitted to police and other officials in all cities of 25,000 or more population. It was reported that 38 cities already are using or taking steps to use this uniform reporting system, which will give the National Safety Council reliable data for classifying the nature and causes of accidents.

From reports already received for the first half of 1925 certain analyses have been made, including one on the type of motor vehicle involved in accidents. This analysis follows:

#### AUTOMOBILE ACCIDENTS INVOLVING PERSONAL INJURY

	Resulting Fatally	Non- Fatal
Total cases reported21,444	799	20,645
Private passenger car18,468	496	17,972
Truck or commercial 4,245	243	4,002
Taxicab 1,896	67	1,829
Jitney 95	4	91
Bus 156	11	145
Motorcycle 579	16	563

These figures represent the experience of a comparatively few cities and are not put forth as indicative of conditions throughout the country. They show, however, how the Safety Council hopes by means of more complete reports to tabulate and analyze information that will be of value in helping to reduce automotive and other accidents.

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# Hannum Steering Gear Provides Variable Ratio

A VARIABLE ratio, no line contacts, reduced backwhip and hardened and ground bearing surfaces are embodied in the Hannum steering gear recently introduced by the Hannum Mfg. Co., Milwaukee, Wis.

The steering leverage is low for straightaway driving, but increases as the sliding member in the trunnion shaft block moves outward on turns. Naturally this means easy handling of the car at corners and particularly parking with balloon tires. The absence of line contacts, results in reduced friction and wear. The displacement of grease inside the housing of the gear has a dash pot action which softens and reduces the backwhip. All thrust and radial loads are taken on ball bearings.

In designing the new steering gear the Hannum company did considerable research work and took particularly into consideration parking of cars when they have to be in small places. It was therefore decided that the gears should have enough leverage or gear ratio when the steering wheel is turned in the extreme left or right position. It was also realized that most of the driving of the motor vehicle calls for little deviation from straight ahead and that most of the driving demands only a half turn or so of the wheel. To get these qualities in the Hannum steering gear the company brought out an apparatus which requires only a small movement of the steering wheel for the greatest steering movement of the front wheels to get comfort to the operator of the vehicle. The steering gear turns normally 21/2 times for com-

The accompanying illustrations show the general construction of the steering gear and it will be noted that the trunnion block pivoted on a pin integral with the nut connects to the front jaws of the rocking shaft to the steering drop arm. At the extreme travel the nut moves to the end of the screw thread and the trunnion block moves out further along the jaws thus increasing the leverage operating the drop arm. The sliding of the trunnion block increases the gear ratio and how this is accomplished is shown in the diagram which indicates the change for every five degrees movement of the steering wheel from the straightahead position. From this it will be seen that less steering effort is required at extreme travel while parking and less movement of the steering wheel during ordinary driving.

A rather novel feature of the Hannum steering gear lies in the design of the gear nut since it embraces only a quarter turn on the screw shaft. This has the advantage, it is stated, that when a shock is transmitted to the drop arm it is transferred to the nut by the trunnion

pin, which is not at the center of the nut. This action causes a momentary rocking on the nut block the face of which is fitted accurately to the gear housing and a thrust is imposed on this face actually tending to force the grease out from the faces. The viscosity of the grease acts as a cushion to absorb part of the blow and the shock is therefore largely dissipated and absorbed in the housing and only a small part of it is transferred to the hands of the driver. In the conventional type of gear in which the nut embraces half or all of the screw

shaft the nut is supported almost entirely by the threads and a shock to such a gear is much more readily transferred to the operator's hands, the company states.

The threads on the nut have an actual bearing area of one square inch in the medium car size while the truck and bus sizes have up to five square inches.

Lubrication is novel since due to the construction of the mechanism in the housing the nut virtually acts as a piston and forces the lubricant to the housing and all the wearing surfaces. This naturally has an important bearing on

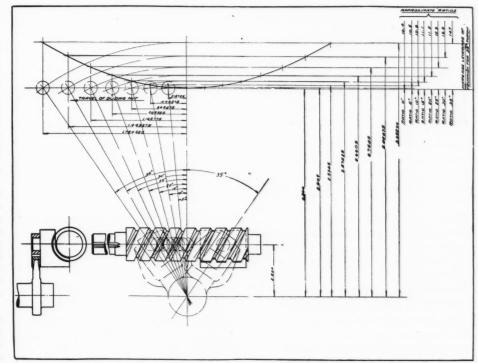
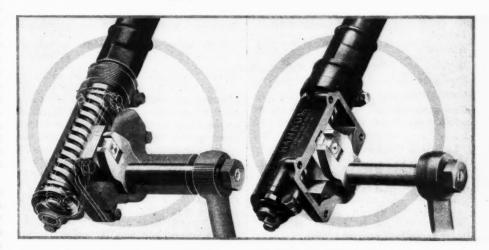


Diagram showing the increase of leverage of the trunnion in the Hannum steering gear for 35 degrees of throw



Two views of the Hannum steering gear. Note that the gear nut embraces only a quarter turn instead of the more usual turn or half-turn on the screw shaft

the ease of steering, long life and low maintenance cost of the device.

The housing is of malleable iron and all bearing surfaces and faces are milled in jigs to secure proper alignment. The trunnion shaft and block are of heat treated steel and the nut is ground after case hardening. The trunnion block is made with a spherical seat in the forks of the rocking shaft which permits of a slight swivelling action and permits the block to align itself. The casing is made oil tight by the use of ground surfaces and a gasket and oil can be used as a lubricant where desired. The gear is interchangeable with the worm and sector type and is lighter in weight.

#### Heldt Brings Out New Book on Fuels and Carburetion

Volume four of the Gasoline Automobile, by P. M. Heldt is now available for automotive engineers and service men. This volume deals with fuels and carbureters.

This book is a valuable addition to any engineering library and takes up not only various types of carbureters, but also discusses various fuels available and their characteristics which affect carburetion. The contents of the book are best described by the chapter headings which are as follows:

Gasoline—Its History, Source and Methods of Production.

The Chemistry of Petroleum Fuels.

Early Carbureter Types.

Theory of the Simple Carbureter.

Mechanically Controlled and Multiple Jet Carbureters.

Automatic Carbureters.

Floatless Carbureters.

Detail Design of Carbureters.

Description of Modern Carbureters.

Fuel Tank and Feed Systems.

Air Cleaners.

Servicing of Carbureters.

Carbureter Adjustment by Exhaust Gas Analysis.

Carbureter Laboratories — Equipment and Tests.

Kerosene and Kerosene Carbureters. Benzol.

Alcohol.

Blended and Miscellaneous Fuels.

Producer Gas and Gas Producers.

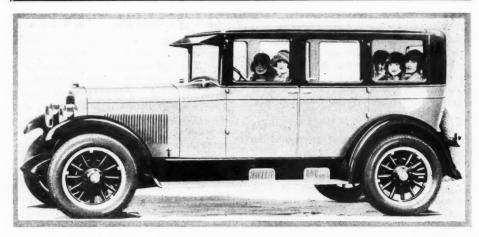
Combustion and Detonation.

The price of the volume is \$5. It is published by P. M. Heldt, Nyack, N. Y.

#### LARGER BRANCH QUARTERS .

BOSTON, Mass., Oct. 5.—Black & Decker Manufacturing Company announces removal of its Boston Branch office to new and much larger quarters at 62 Brookline Street, Boston. This new office will be in charge of A. D. Geiger recently appointed branch manager of the Boston territory to succeed D. G. Caywood who has been put on special work by the company,

#### Cleveland Special Sedan Roomy Car



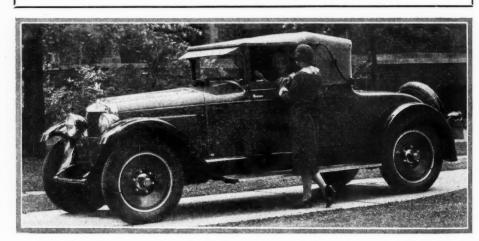
Cleveland Special Sedan, seating five passengers and which lists at \$1295 f. o. b. factory

ONE of the new model announcements of the Cleveland Six which has made it necessary for the factory to increase its production schedule is the Special Six Sedan, a roomy car seating five passengers.

The body is hung low and completely paneled in metal. Doors swing wide for

easy entrance and exit. Interiorly the color scheme is gray. Broadcloth constitutes the upholstery and the instrument board is finished in circassian walnut. The rear doors have individual pockets. Balloon tires are standard equipment while four wheel brakes are optional at a slight extra cost.

#### Cabriolet Roadster Latest in Wills Sainte Claire Six



Wills Sainte Claire Roadster in which the windows can be raised when the top is down, effecting side windshield wings

THE latest body style to be added to the Wills Sainte Claire line of sixcylinder cars is the new Cabriolet Roadster-a two-seater. The top is Burbank with natural wood bows. It can be folded down easily and quickly, with the top lying close to the body, harmonizing with the stream line effect. The sun visor is covered with the same material as the The windows can be raised when the top is down, effecting side windshield wings. There is a large compartment for golf bags opening on the right side and another smaller compartment just behind the front seat. The upholstering is Beige, hand brushed Spanish leather, fashioned over deep cushions. There is a rumble seat which accommodates two comfortably. The rumble seat is finished with the same leather upholstering, with nickeled arm rests.

The addition of this body to the Wills Sainte Claire line is another indication of the demand for the two seater roadster. The construction of the top affords all of the comforts of a closed car and yet it is possible in a vehicle of this kind to quickly change it to an open model. For touring in mountains certainly it is very desirable to possess a vehicle in which the top can be folded down easily. The fact that the windows can be raised in this model with the top down makes it very desirable for touring purposes.

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# Radio Dealers Stage Show at Chicago

Stabilization of Radio Merchandising Indicated By the Lack of Fundamental Changes Evidenced Since the Exhibits of Last Season

#### Making Radio an All-Year Business

Chicago, Oct. 5.

As FAR as Chicago and the central west are concerned, the radio season has started with the National Exposition held from Sept. 28th to Oct. 3rd at the American Exposition Palace under the auspices of the Radio Dealers' Association of America.

To put the radio business on a substantial basis it is essential that it be as nearly an all-year business as possible.

A year or so ago the radio sales started just before Christmas and stopped soon after, then they began covering a period of two or three months. Now the boom in radio is starting with the first fall days and the holding of a show at this time demonstrates the trend of radio merchandising toward an all-year program.

Another radio show, under the supervision of the Radio Manufacturers' Association, will be held in Chicago during the week of Nov. 17-22, and in this connection it is interesting to observe the parallel in merchandising methods used in radio and automobile sales. For a number of years there have been automobile shows in Chicago in January, but for several years there has also been an earlier show held in the fall for the purpose of presenting to the public the closed models.

#### Trade Days Observed

This radio show takes on a similar aspect, that of presenting to the public its wares at an early date, but it also affords an opportunity for dealers to meet with each other and with manufacturers and take up their merchandising problems.

At this show, the hours from 11 a.m. to 2 p.m. were reserved for dealers, the public being admitted in the afternoon only.

A representative of Motor Age, visiting the show, frequently asked the question,

"What do you consider the high point of the show; that is, what new and striking development is presented which we did not know about a year ago?"

And the answer universally was "There is nothing radically new."

As far as the radio dealer is concerned, this is the most encouraging indication that possibly could be obtained. Developments, of course, are being made, but the indication is these changes will be gradual, that a set that is good merchandise this year will not be obsolete next year.

Due to some improvements in later models it may be of less value, but it will be far from obsolete.

There are of course developments of interest. At one booth for example a miniature three tube complete set was shown which occupied a space  $3\frac{1}{2}$  in. by 4 in. by 7 in. without space for batteries. On the other hand there were console sets with provision for concealing A and B batteries, which partook more of the dimensions of the grand piano, and between these extremes were sets of all styles and prices.

#### To Spread Radio Net For Car Thieves

MILWAUKEE, Wis., Oct. 5.—A radio net for automobile thieves under plans worked out by the automobile squad of the local police department may cut down the number of successful automobile thefts in Wisconsin during the next few months.

The plan provides for broadcasting a report and description whenever a car is solen, with further announcement of whatever reward may be offered by insurance companies for return of the car and capture of the thief.

It is hoped that expectation of earning the reward will prompt many in the radio audience to keep on the lookout for the cars.

The announcements will be broadcast from Milwaukee's two powerful stations, WHAD Marquette Universiy-Milwaukee Journal station and WSOE School of Engineering-Wisconsin News station.

Simplification of control was noticed on some sets where a single knob or dial is used for tuning. The simplification seems, however, to be from an external standpoint, as inside the set the unit control resolves itself into a simultaneous control of two or three condensers.

B battery eliminators still arouse interest although the number of console sets made with provision for batteries does not indicate any immediate revolutionary step. One B eliminator excited more than passing interest as it to some extent puts the radio set and its battery on the same basis as the battery in the automobile. This device is known as Socket Power, being the product of the Philadelphia Battery Co. It combines with the eliminator a rectifier which is automatically connected to give the A battery a trickle charge when the set is not in use.

#### Radio Winter Sales Asset

PORTLAND, Ore., Oct. 3. — Garage dealers throughout the Pacific Northwest are slowly beginning to realize that the radio will be a big asset' for them during the winter months when car sales begin to slow up. Among the recent garage and automobile dealers who have recently been appointed as dealers for Grebe Synchrophase by the Stubbs Electric Co. of this city who are distributors for this equipment in all of Oregon. Washington and Idaho, are the Addington Garage, Addington, Idaho; Jordan Electric Company, Ashland, Ore.; Thompson Garage, Athena, Ore.; Purkheiser Electric Co., Caldwell, Ida.; Cambridge Garage, Cambridge, Ida.; Tourist Garage, Clatskanie, Ore.; Latourell Auto Co., Heppner, Ore.; Shurtless Garage, Payette, Ida.

# A Booklet on Storage "B" Batteries

THE advantage of storage "B" batteries both from a cost and operating standpoint are pointed out in a booklet being distributed by the National Battery Manufacturers Association, 17 W 42nd street, New York.

The material for the booklet was prepared by Mr. H. A. Harvey, engineer for the U. S. Light and Heat Corp., this concern being a member of the association. The information is based on careful investigation and should be of interest to garage men, battery men, radio dealers and radio manufacturers. Samples of the booklet will be sent on request and quantities for distribution over the counter or by mail may be had at nominal rates.

#### **Build Broadcasting Station**

THE Kierulff & Ravenscroft Company, Southern California pioneers in radio distribution, Los Angeles, has constructed in its building an up-to-date 500-watt broadcasting station at present operating on 250 watts, 208 meters, 1440 kilocycles, using storage battery equipment throughout. It is the only station of its power so equipped on the Pacific Coast.

The Kierulff & Ravenscroft Company is distributor in the state of California of the Kennedy and Crosley radio receivers, Cunningham tubes and Burgess batteries. The station has been primarily constructed by radio men for radio men and it is the intention to assist by broadcasting for any and all radio manufacturers, jobbers or dealers throughout the state.

# MOTOR AGE'S PICTURE PAGES



AUTOMOTIVE MAGNET. A Longren airplane was suspended above the filling station of Wimer & Co., Denver, by a scarcely visible cable and guy wire, giving the impression that it was about to land for fuel. This stunt proved a good advertising medium for the fuel dispensed

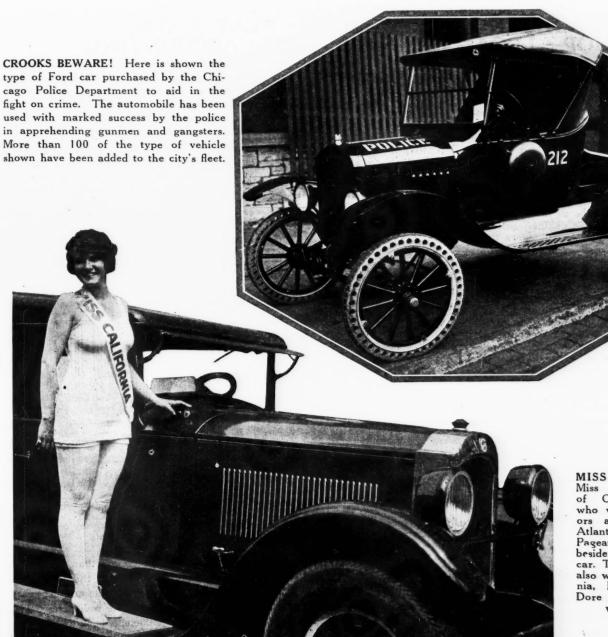


NOT TOO TIRED TO PARADE. A feature of the recent annual fair at Leipzig, Germany, was this grotesque living ad of Michelin tires



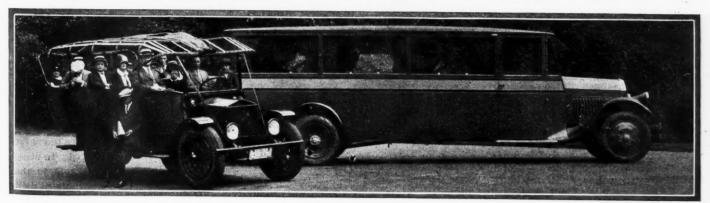
SHOWING THE NEW PRODUCT. Powerful searchlights playing on the building of the Troy Motor Sales Co., Los Angeles, attracted wide attention to the introduction of the Ajax. The searchlights were mounted on motor trucks and the illumination was visible for miles distant

# OF AUTOMOTIVE INTEREST



MISS AMERICA.

Miss Fay Lamphier
of Oakland, Cal.,
who won first honors at the annual
Atlantic City Beauty
Pageant, is shown
beside a Studebaker
car. The second prize
also went to California, Miss Adrienne
Dore of Hollywood
winning it



WHEN THE OLD MEETS THE NEW. Luxurious buses are rapidly replacing the smaller vehicles of an earlier day, making sightseeing trips more enjoyable for the tourist. Above is shown a Pierce-Arrow six-cylinder motor bus of a late type and one of the earlier vehicles used by motor nomads

# The READERS' CLEARING HOUSE

Questions and Answers on Dealers' Problems
BUILDING - ELECTRICAL - FLAT RATES
SHOP - LEGAL - PAINT & TRIM - ACCOUNTING

#### Fan Not Used at High Speed

Q. A diagram and explanation of the principle of operation of the fan and fan releasing mechanism as used on the Wills Ste. Claire would be appreciated. Oscar Shilts, 630 Gary place, Chicago, Ill.

At Fig. 205 is shown a section of the fan and fan releasing mechanism of the Wills Ste. Claire engine. The principle of operation of the fan release mechanism is exactly the same as the camshaft brake used on the same engine. Briefly the action is as follows: Oil enters the drilled fan shaft, flows to the end, as will be noted in the diagram. At the end of the fan shaft there is a small cone which engages with a female cone backed up by a coil spring as shown. At ordinary engine speeds, or, in fact, at all speeds up to approximately 35 miles per hour in high gear the pressure exerted between the male and female cones by the spring provides a connection between the fan shaft and the fan propeller blade. However, as the engine speed increases and the oil pump pressure goes up oil is forced out of the hole in the small cone and counteracts the tension of the coil spring and allows the fan to slide on the film of oil between the two tapered surfaces. In other words, the pressure on the oil passing through the fan shaft pushes the male and female cone apart and the drive is partially disconnected, although the fan will continue to rotate at a certain speed made possible by the friction of the fluid itself.

Q. A diagram of the water circulation pump as used on the Packard eight will also be appreciated.

Diagram requested is shown at Fig. 206.

Q. Also a diagram of the sylphon attachment that regulates the temperature of water as used on the Packard car.

This shown in connection with the water circulation pump at Fig. 206.

#### THINGS THAT MAKE GEARS CLASH

Q—We have a baby Overland in which the gears clash when shifting the clutch. Can you give remedy for same? The clutch and transmission seem to be in perfect order. We have put in new clutch sleeve but that does not seem to remedy the condition. We tried loosening the clutch but the clutch pedal strikes the foot board on the back if loosened any more.—Kaw Valley Garage, Grantville, Kansas.

One possibility is that the clutch brake is adjusted too close, another being that the clutch brake fiber is worn. Other possible causes are in a clutch brake where the surface is rough or in clutch pedal improperly adjusted. If the shifting forks are bent this same trouble will be experienced. The clutch will also drag if the lubrication is too heavy or if a disc is broken. Another cause is in

excessive wear of the transmission main drive gear bushing or bearing while loose countershaft gears will also cause this condition.

#### REMEDY FOR STICKING CLUTCH

I notice in the June 25th issue of Motor Age that Mr. F. X. Witt of Metamora, Ohio, is having trouble shifting gears on his Fordson. I think that if he replaces

## Trouble Is Probably Due to Corrosion

Q—We have had a great deal of trouble with the exhaust valves rusting in the guides on a 1917 Haynes. There are no cracks in the cylinder block and we have put in new guides and valves but this did not help any. Could you give any information on this.—Croft Machine Co., Moberly, Mo.

It seems strange that the exhaust

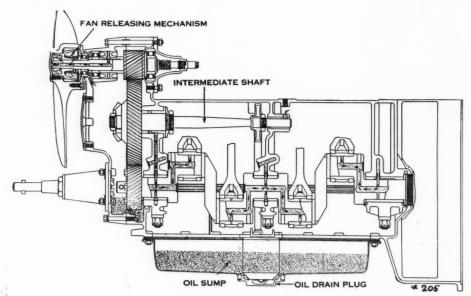
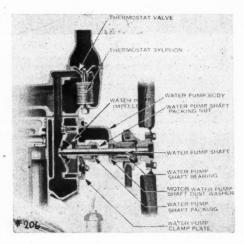


Diagram showing fan release mechanism on the Wills Ste. Claire. A spring controlled cone type clutch is released by oil pressure at high speeds

part No. s-408, clutch drum, that his trouble will end. The clutch plates wear notches in the drum and they will not release freely. J. W. Berry, Burrton, Kansas.



Sectional view of portion of Packard eight engine showing water pump and Sylphon thermostat

valves would rust more than the intake. We accordingly feel that this is not rust but is corrosion due to the exhaust gases. Possibly the muffler is badly clogged up and causes sufficient back pressure to force some of the exhaust gas to go out past the valve stems. This would tend to blow off the lubricant and corrode the stems and guides. If the car has not had a new muffler for two or three years, it would be desirable to install one and to thoroughly clean out the exhaust pipe.

If the corrosion occurs on both exhaust and intake valve stems to some extent, it may be that the stems are receiving insufficient oil. You can probably determine this by examining the inside of the valve chamber where the valve springs and stems are enclosed. In some cases where insufficient oil gets to the valve stems, it is found desirable to drill one or two small holes from the valve chamber into the crankcase, so that more oil vapor will enter.

# Planning Your New Building READERS



#### A Tall Building With Short Ramps

I am interested in a sales and service garage about 70 by 140 feet, three or four stories and basement, to be located on corner lot open on four sides as per sketch

I would like to have any back numbers Motor Age containing plans or photos of buildings approximating these require-ments, also any special numbers or articles dealing with arrangement, re-quirements and construction of modern commercial garages.

We have used a scheme in this building which has become quite popular in storage garages and should be just the thing here.

If the grade in the side street were sufficient to carry the street to the second floor level, then we would be inclined to use an ordinary type ramp, but since it will take you only approximately half way up by staggering the floors and using an intermediate floor between each main floor level, as indicated in our sectional diagram, cars may enter on the second level and go from there to the basement or to any other upper level with no trouble whatever. This type of construction has the advantage that it can be added to at any time. The ramp may be continued up, using the roof as storage space and as more space is needed other stories may be added to take the place of the roof and a new roof built over them. In this respect you may add more floors below the basement level as shown.

In our layout we have made the upper, or fifth level the shop space, but the third level might also be used for shop purposes in the same way. The fact that you have open space all around your building, makes it possible to use the lower floors for shop space where in other buildings it could not be done. It may be however, that the third level would be a very suitable space for a used car showroom and that the basement, second and fifth level floors would take care of all the storage you have.

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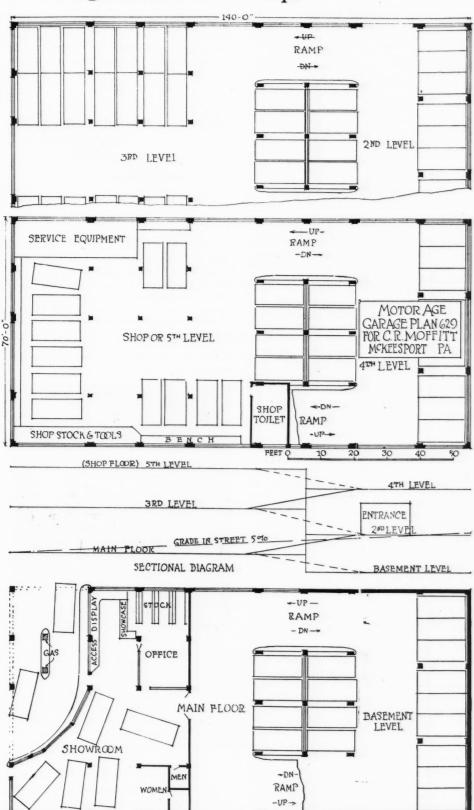
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If we were building this place ourselves, we would think a long time before using the best part of the first floor for a filling station. Filling stations of course, have their use and their advantages, but it seems to us rather a scar on the face of a beautiful new building, such as this is going to be, and we would much prefer having a beautiful showroom in its place. The columns might also be arranged to better advantage if the filling station had not to be consid-

This however, is a matter of personal opinion and it may be that your location is especially adaptable to this sort of trade and it may do you a lot of good, where it would be a detriment to some places. The type of construction used in this layout is said to be patented, but the royalties charged for the use of it, are not excessive and it is considered well worth the price.



The diagram shows how the floors are arranged, half of them intermediate between the others, the short ramps connecting the aisles. The filling station seems out of place in a building of this sort



# Defeating Old Man Wear and Tear

#### Negative Caster a Recommended Cure

Q. I have a straight eight Packard which is equipped with balloon tires. When I purchased this car it had the Packard worm and nut steering gear and the bad habit of shimmying, at speeds above 25 miles per hour. I had their new type worm and segment steering gear put on and it has taken the jerk out of the steering wheel and some of the shimmy. However, if any play is allowed to get in the gear or rods the shimmy shows up in proportion. Do you think it would help to tilt the front axle by putting in some tapered plates between the springs and axle? I would be glad to have any suggestions that you have to offer. Jerry Robinson, Albin, Miss.

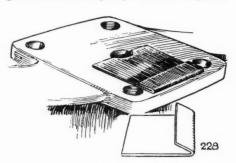
The Packard maintenance organization in this city suggests that the toe-in of the front wheels be reduced to is of an The next step in the correction of the shimmy is to secure a piece of 32 sheet stock wide enough to cover the spring width and long enough to extend from the front of the axle spring pad to the rear of the spring center bolts plus one inch. Fold this piece of stock over so that there is a portion of it one inch long, 16 of an inch thick, the remainder inch. Cut a slot in the thin end to go around the spring center bolts so as to keep the shim in position and install with the thick end toward the front. This gives a negative caster or tips the top of the axle forward. A clear idea of the method of blocking the springs is illustrated at Fig. 228.

#### WEAK GOVERNOR SPRINGS CAUSE KNOCK

Q—We are servicing a 1922 Jewett. It runs fine except that after motor gets warm it has a fuel or spark knock, that we have been unable to do away with. Cleaning out the carbon helps for a short time. Have changed ignition setting and also changed mixture. When car was new could step on it hard and it never murmured. Shortly after the customer got car it started to pump oil and we put in some oil rings and stopped that. We cannot afford to experiment too much with the car and thought you might be able to give us a lift. On a couple of other Jewetts we have changed valve timing and used 2-head gaskets but with no great success.—John H. Suter, 507 Cornhill Street, Peoria, Ill.

According to information supplied by the local Paige-Jewett Maintenance Organization the trouble is most likely in the ignition distributer unit. At Fig. 226 you will note a top view of the ignition unit. Directly below breaker arm mechanism is the automatic spark advance governor mechanism. There are provisions made for three springs on this governor and a few cars have come through with one or two springs only. The knock is caused from weak governor springs allowing the weight to fly out and advance the spark too far at the time engine is accelerated. The cure is to increase the tension. If there is only one spring on the governor install a

second one and try the car. If the second spring does not eliminate the knock install the third one. If the governor has three springs at the present time it probably will be found that there is considerable lost motion in the governor before springs start to lengthen.



An added shim to curve the shimmy

The amount of this lost motion can be determined by moving the weights with the finger while the engine is stationary. The cure consists in cutting off each spring so as to eliminate all lost motion. When you have done this set the spark in regular position. The normal spark setting for the 1922 model is 1½ inches past top dead center position on the fly-

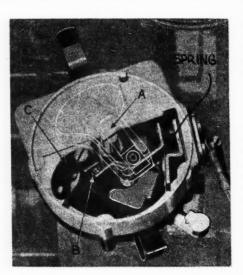


Fig. 226—Atwater Kent ignition on Jewett cars

wheel with full retard. If owner complains of spark knock after governor has been tightened it indicates that he accellerates too rapidly in which case it may be advisable to disconnect governor and use manual control only.

#### A MOTOR CLUB SUGGESTION

The following mechanical hint is sent to us by the Chicago Motor Club. When working on push rod assemblies, it will be found that time and trouble is saved by slipping a wedge of hard wood under the head of each valve. This saves loosen-

ing and lowering all the tappets. The wedge holds the entire valve group off the tappets.

#### Camshaft Bearing Construction on Lincoln

Q. I have several questions to ask in regard to Lincoln cars. How is the camshaft held in place?

The camshaft bearings are bronze. The rear one is cast in the case and is held in place by a cap screw. The four bearings immediately forward of the rear one are sleeves pressed into the case. The front camshaft bearing controls the end play. The shoulder on the camshaft located behind the rear of the front bearing prevents the camshaft moving forward while the sprocket prevents the camshaft moving toward the rear. The front camshaft bearing is held in place by means of two cap screws through an elliptical flange.

Q. Why can only one shifting shaft in the transmission be moved at a time?

The shifting shafts are notched on the side of the shaft which face each other. A pin with rounded ends is mounted in such a way that the ends rest in these notches. When one shaft is moved it forces this pin farther into the other notch so that the other shaft is locked. Before the other shaft can be moved the first shaft will be returned to the neutral position so that the pin can enter the notch in this shaft and permit the other one to be moved.

Q. What is the purpose of the large vacuum tank employed? Nebraska Subscriber

The large vacuum tank which holds about two gallons makes it possible to run with wide open throttle for a considerable distance. Under these circumstances the vacuum in the intake manifold is very low which tends to prevent the tank drawing up gasoline from the main fuel supply tank while driving with wide open throttle. The large vacuum tank merely supplies an ample reserve for such conditions.

#### OIL PRESSURE ON GARDNER

Q—What is the proper oil pressure on a 1924 Gardner car and how can pressure be increased?

The recommended oil pressure at average speed is 2 to 7 pounds. The throttle is directly connected with the by-pass on the oil pump and as the throttle is opened the pressure is increased giving greatest pressure when greatest power is required. It is possible to regulate the pressure reading on the gage by adjusting the link connecting the pump to the accelerator.

In addition to this linkage there is a spring loaded relief valve in the pump body which can be adjusted to give higher pressure at idling speed.



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# Clearing Up Electrical Troubles

EDITED BY A. H. PACKER

# How to Connect Ignition Coils. Who Knows?

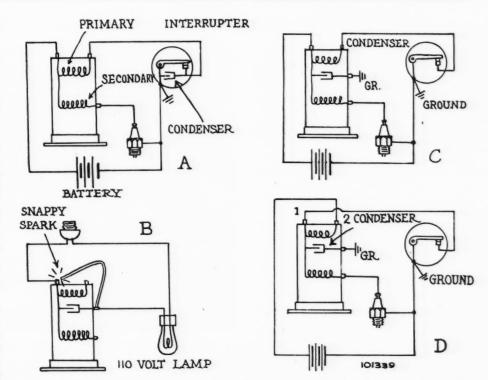
Q—Please tell us a simple way to test automobile coils.—Crutchfield Meter Co., Orangeburg, S. C.

We are showing an illustration which gives four sketches, A, B, C & D. When the coil does not contain the condenser the test is comparatively simple as shown at "A". An interrupter of some sort should be used which either contains a condenser or has one connected across its contacts. To make the test a 6-volt storage battery is normally used as most of the ignition systems are 6 volt. In the case of a Dodge Brothers ignition unit or other 12-volt outfit a 12-volt battery would be used. On the ordinary coil it is usually evident which terminals are connected to the primary winding, but if in doubt a test can be made with battery and ammeter.

The primary winding will usually allow from two to eight amperes to flow, depending upon the type of coil. In sketch "A" it will be seen that the current from the battery flows through the primary of the ignition coil, then through the interrupter to the grounded side of the interrupter and back to battery. This completes the primary circuit. From the secondary or high tension terminal a wire goes to a spark gap which can be made from a spark plug with the points opened up to give a gap approximately  $\frac{1}{16}$ " wide.

When the condenser is in the coil the problem is a little more complicated for there is a chance to wire the coil correctly so that the coil condenser is connected across the interrupter contacts. It is also possible to wire it incorrectly so that the condenser is not connected across the interrupter points. Sketches "C & and D" give the two methods and we are going to let you study these and see which one you think is correct. We hope other Motor Age readers who are not clear on this question will send us their answer and we will be glad to reply telling whether answer is correct or not.

In testing a coil of this kind it is first desirable to make a sketch showing the various terminals and then test to locate the primary, secondary and condenser and draw in these units on your sketch. At "B" there is a method shown of finding the condenser by using a 110-If the lamp is connected volt lamp. across the primary it will light up, which will show that these are not the condenser terminals. If connected across the secondary the lamp may not light up on account of the high resistance of the secondary, but a faint spark will be seen when the circuit is broken. If connected across the condenser the lamp will not light and there will probably be



A: Simple way to test an ignition coil; B: Locating or testing the condenser; C and D:
The right and wrong way to connect a coil which contains the condenser

no spark visible. The test to make then consists of leaving the 110-volt lamp connected to the condenser as shown at "B" and while it remains connected, take a short piece of wire and connect across the condenser. When this is done a snappy spark which makes a noise like the crack of a small whip will be seen Having heard. located primary, condenser and secondary the coil can be wired up in accordance with sketches "C or D," one of which gives good results and the other, being incorrect, gives poor results. Note that no condenser should be used in the interrupter in sketches "C and D" as this would give an incorrect test showing a good spark from a coil in which the condenser might be defective.

#### Modern Electricity Flows the Other Way

Q.—I would appreciate a little more information on the article "Electro Magnets" in the July 18th, 1925 issue of Motor Age. One man considered to be one of the best electricians tells me you are wrong. He says the current flows from the negative through the circuit and back to the positive, but in all my text books and teachings I learned that the current flows from the positive to the negatives. Please advise whether I am right or wrong. Arthur T. Kennedy, 300 N. 7th street, Salina, Kansas.

Nobody knows what electricity is and it is very doubtful whether any one knows which way it flows, or in fact whether electricity actually flows or not. However, in working out our electrical problems it is very convenient to figure that electricity flows very much as water flows through a pipe except that the electricity is imagined to flow through a solid conductor. All of the theory of electricity and magnetism that is in use in designing electrical machinery such as generators and ignition coils, is based on the belief that the flow is from positive to negative.

The situation is quite similar to what we might have if someone would design a clock in which the hands would go around the other way. It would probably work just as well as the clocks we use today. In like manner all of our electrical theory has been worked out on a certain basis so it seems to be more convenient to continue in that way.

Your electrician is doubtless correct according to the latest data obtained in radio where it seems that electrons or negatively charged particles of electricity actually travel from the filament to the plates in the radio tubes. If this is actually the case then it does appear that the flow is from the negative to the positive. It would be evidently quite a job to write all of our text books over again and as we can work our problems out from them by using the theory in the old fashioned way, it may be better for the time being to think of current as flowing from positive to negative except in the case of the radio tubes or other devices in which the electron theory comes into play.



# Motor Age's Flat Rate Forum

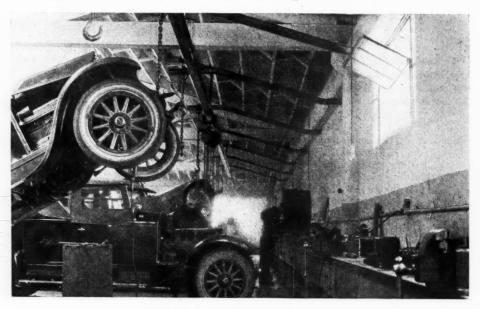
EDITED BY B. M. IKERT

#### Orderliness and Cleanliness in Stockroom Help Flat Rate

THE stockroom may not have any direct bearing upon the workings of the flat rate system, but there certainly is something to be said about speeding up operations by a neat and well kept stock of parts. In fact, some of the leaks in many a shop and the failure of the flat rate system to bat 100 per cent can be often traced to a poorly arranged or kept stockroom. Much money is tied up in parts and accessories for the particular car or cars handled by the dealer or distributor and it is just as important for the stock department to be run on a businesslike basis is as any other part of the business. Too often does the dealer send hurry-up orders to the factory for supplies or parts, only to find that he has sufficient of them on hand, but they were not where he thought they were, hence he assumed the supply exhausted. This means not only tying up money in unnecessary parts or supplies, but it breeds dissatisfaction in the customer who is obliged to wait for things to come from the factory. Service means service. and there is no department more important to the full meaning of the word than the stock room.

#### Know Your Stock

There should be a place for everything, and then the men must be under the strictest of orders to keep everything in the designated bins or compartments provided. It should be looked upon as an unpardonable offense for the foreman of the stockroom to have to send



THINGS THAT HELP FLAT RATE

Above is shown a system for supporting motor cars for repair by means of a chain extending from a steel I-beam. These I-beams in turn support the track on which the chain hoist operates. Such a layout permits one chain hoist to be used in raising and lowering 11 cars in this particular shop. The hoist raises the car until the chain can support it whereupon the hoist is released for the next car

wire orders for parts. He should carefully check the quantities of each thing, and order more when the predetermined minimum is reached.

In this the factories' own methods should be followed as closely as possible,

for through long experience the stock departments of the factories have almost all devised schemes of stock keeping and maintenance that cannot help but be of benefit to the dealer if adapted to his own business with whatever modifications are required to meet his particular needs and conditions.

Many factories are supplying the dealers with special instructions for stock room maintenance, and some even have special forms and systems which they recommend installing.

#### Systems Sometimes Too Elaborate

Of course the man running a large city sales agency is called upon for a more extensive system and scheme of checking than the dealer who does business in a smaller way. Nevertheless the same efficiency should be practiced by both. Certain extensive schemes of stock keeping that pay the city man would waste money for the little fellow, and therein is the secret of any man's success. He must adapt efficiency methods to the needs of his business, and not try to remake the business to conform to any efficiency schemes. For instance, it would be a waste of money for the small dealer to have a stock keeper who did nothing else but take care of the stock room, although the city dealer would be very foolish if he did not have a stock keeper where he has a large business and a big service station. In the small garage, the shop foreman can very well take care of the stock in good shape.

#### MOTOR AGE'S FLAT RATE FORUM

No. 34

#### FLAT RATES FOR FORD MISCELLANEOUS ENGINE OPERATIONS

		arges
1.	Overhaul motor and transmission	.\$35.00
2.	Overhaul motor only	30.00
3.	Overhaul transmission only, or repair or replace magneto	. 22.50
4.	Rebraze crank case arms or support or repair leak in case by taking out motor	
4a.	Replace crank case only (no other work)	17.50
5.	Install or refit one piston or one connecting rod	6.00
6.	Install or refit two pistons or connecting rods	. 8.00
6a.	Install or refit four pistons or connecting rods	12.00
7.	Tighten one connecting rod bearing (\$1.00 per rod for each additional rod)	
9.	Replace transmission bands (Sedans and Coupes \$1.00 extra) Starter types \$1.00 extra	4.00
10.	Replace transmission cover gasket (Sedans, Coupes and Starter types \$1.00 extra)	4.00
10a.	Replace transmission cover (Sedans, Coupes and Starter types \$1.20 extra)	7.50
11.	Change motor	10.00
11a.	Change motor and starter equipment	12.00
12.	Replace cam shaft and refit bearings	10.00
13.	Replace cam gear—large	
14.	Replace cylinder front cover	3.50
15.	Grind valves and clean carbon	
15a.	Special tune-up	2.00

#### THE MARKET'S NEW OFFERINGS

#### Accessories—Equipment—Supplies

Gates Bullseye Patch

ON the theory that the most important part of the patch for punctured casings is the center or the area immediately around the hole or crack the Gates Rubber Company, Denver, Colobrought out the Gates Bullseye Patch. The central portion of this patch is made of amalgamated gum, a special self-sealing compound which cures in service. The gum is said to have exceptional binding properties. The "bullseye," or central portion of the Gates patch, is reinforced with wide, circular



Decker Sparelok



Gates Bullseye Patch

plies of tire fabric made of a high quality material. The company declares the patch makes a quick, easy and permanent repair on both balloon and high pressure casings. Dealer price for patch No. 1, 5½ inches in diameter, in lots of less than ten is 17 cents; from 10 to 50, 15 cents; from 50 up, 13 cents; Cons. list, 35 cents. Dealer price for patch No. 2, 7 inches in diameter, in lot of less than ten, 23 cents; from 10 to 50, 21 cents; from 50 up, 19 cents. Cons. list 45 cents. The patches are packed, 10 patches per carton with printed directions on envelopes.



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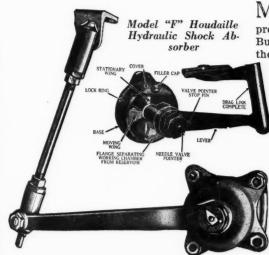
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#### Get Lined Up for Winter Business

Winter business is near at hand and enterprising accessory merchants are getting ready for it.

Special thought is being given to stocking with the items that will have ready sale through the influence of cold and bad weather.

One thing the enterprising accessory merchant will do will be to remind car owners not to delay attention to their cold-weather automotive needs.

With the merchant who advertises in newspapers it is not too early to allot space to this purpose. Those who reach the owner by this or other methods will find him in many cases with winter accessories on his mind.

By whatever plan the owner is reached it is well to get him to thinking about his winter needs now—or better yet—buying now.

#### Houdaille Shock Absorber and Scully Spring Protector

M ODEL "F" double acting Houdaille Hydraulic Shock Absorber is a new product of the Houde Engineering Corp., Buffalo, New York. In the illustration the full view shows the instrument used

for the rear installation on Fords while the insert shows the fittings for the front Ford installations. Each fitting is an integral part of the instrument—nothing being loose. A Ford installation can be made in 25 minutes and costs \$25, complete.

Scully Spring Protectors, also made by this company, are designed to protect springs from dust, mud, water and other deteriorating agencies. They are made of cellulose leather especially developed for this purpose.

#### Decker Sparelok

PROTECTION against theft of the spare tire or disc wheel is offered in the Decker Sparelok which is being produced and distributed by the Richard M. Decker Company, of Chicago. The Decker Sparelok replaces the nut or bolt which holds the spare tire or disc wheel on the carrier. It is screwed on tightly with the hand, a Yale key is removed and the device is in the locked position. Finished in black enamel and attractively designed the Decker Sparelok lists at \$4.50.



New Bosch Wiper

NCORPORATING important improvements a new model of the Bosch Electric Windshield Wiper has been put into production by the American Bosch Magneto Corporation, Springfield, Elimination of lost power through friction and elimination of noise resulting from worn gears is said to be accomplished in this wiper through transmission of power by direct linkage instead of through the usual train of gears. The power developed by the Bosch wiper is claimed by the company as an especially attractive feature. This permits use of a tandem attachment, or additional wiping arm, mounted on an adjustable rod and makes it possible for the driver to have the two wiping arms working in unison. They can be located closely together or used widely apart. The tandem arrangement is furnished at a slightly added cost. The price of the wiper complete, with attaching cord, including tax, is \$9.50. The Tandem Attachment costs \$1.75 extra.

# GETTING NORE OUT of the SHOP

Jackson Valve Grinder and Drill

A general service tool in the form of a combination valve grinder and drill has been brought out by Mann & Briggs, Wabash avenue at 21st street, Chicago. Because of its short oscillation it never throws off the grinding compound, it is said, even at top speed and the valve can be ground in from 8 to 10 seconds. The oscillation is ½ of a turn which permits the use of the valve grinder at an angle of 45 degrees making it possible to grind valves under overhanging cowls.

As a drill it is said to be light and easy to handle and has a capacity up to ¼ in. With a special steel carbon removing attachment for the oscillating spindle, carbon can readily be removed. The combination valve grinder and drill with a 4 in. by 34 in. emery wheel attachment has ample capacity for grinding chisels, drills and other tools and is said to make a compact all around small bench grinder. It is operated by 110 volt universal motor and weighs 81/2 lbs. The tool with cable and connector plug, valve grinding spindle, two valve tips, one valve spring, 1/4 in. drill chuck, and bench grinding arbor is priced at \$45, f. o. b. Chicago. An attachment for grinding valve-in-head motors can be had for \$2 extra and the price of the carbon removing brush is \$2.25.

#### Dropfo Bench Vise

Under the trade name of "Dropfo," a vise that is made entirely of drop forgings, excepting only the handle, is now available. Each part is machined to be interchangeable with the same part on any other vise of the same size. The jaw plates are knurled and forged under the hammer and doweled onto the jaw. Thus it is possible to replace the jaw plates, which are naturally subject to wear.

The Dropfo Vise is lighter in weight than a cast iron type and made with a swivel base and wedge lock that is quick



to set and automatic in tightening up, and has a grip that cannot shake or break loose, it is said. It is also made in the stationary type.

The vise is made in four sizes: 3 in. with jaws opening  $5\frac{1}{2}$  in.; 4 in. with jaws opening 6 in.; 5 in. with jaws open-

ing 8 in.; and 5 in. heavy duty with jaws opening 8 in.

The vise is manufactured by The Fulton Drop Forge Company, Canal Fulton, Ohio.



Jackson valve grinder and drill, a compact unit for the automotive shop



Milburn Acetylene Regulator
(Cut shown above)

Gas such as oxygen which is compressed in cylinders for welding and other purposes has to be delivered at reduced pressures ranging from several ounces to several pounds per square inch. Regulators are made for this and one of the latest of these is the Milburn made in various sizes known as the Standard, Single Gage for decarbonizing and ordinary gas regulating and Master regulators for the delivery of large volumes of oxygen or other gases to a number of outlets. The Milburn regulator is said to be noted for its extreme simplicity and accessibility. The rear opening is only 11/8 in. in diameter which enables the cap to be unscrewed, the seat

and nozzle to be immediately reached without undoing any other part. In the case of its requiring a new seat it can be immediately reversed or replaced. Bronze forgings are used for the major parts and the nozzle is of Tobin bronze. The operating pin is made of monel metal and a renewable coupling nut is provided. The diaphragm is made of resilient nickel silver and the adjusting key is quite large and provided with an easy grip. The seat is subject to very slight wear as the spring closing the seat with instead of against the pressure enables the seating to be effected by a sealing pressure of several pounds instead of hundreds of pounds. The maker is the Alexander Milburn Company, 1416 W. Baltimore street, Baltimore, Md.

#### Van Dorn 6 in. Bench Grinder

This grinder comes complete with two grinding wheels, adjustable tool rests, wheel guards, switch and cable, ready for use. It is provided with a handle for convenience in carrying about the job. The real improvement lies in the wheel guard. This particular grinder has an improved wheel guard which can be adjusted very easily with one bolt so that at all times the front end of the guard is always close to the grinding wheel. This allows the emery wheel to be used with complete safety to the operator, even when the diameter has become very small. Of course the tool rests are also adjustable so they are the proper distance from the grinding wheel. The price is \$38. It is made by the Van Dorn Electric Tool Co., Cleveland, Ohio.



Van Dorn 6 in. bench grinder

#### WORTHINGTON AIR COMPRESSOR

In the September 24 issue of Motor Age on page 30 there was published a description of the Worthington Feather Valve Vertical Air Compressor, but the name and address of the manufacturer were omitted. Worthington Pump & Machinery Corp., with offices at Broadway & Cedar St., New York City, are the makers.

# EDITORIAL

#### Guessing Versus Knowing

E still come in contact with automobile dealers and repairmen who ridicule modern methods of accurately diagnosing and correcting mechanical troubles. New oversize pistons are fitted in cylinders to overcome piston slap, but the cylinders are not reground or honed. They looked round to the mechanic and he did not use a micrometer. When the job is done the slap is still there. Cylinders must be out of round, says the mechanic. The time for him to have investigated that possibility was before the work was done.

Valve tappets are noisy. The mechanic scorns the idea of using a feeler gage to get the right clearance. He says he can set them right from the feel. When he is through they work all right but the noise indicates that the clearances are not uniform. The customer is not satisfied.

These are only two of the instances in which the use of the right tool at the right time would have enabled the repairman to do a better job in less time and would have saved the owner money. Fingers were made before forks but in the modern scheme of things we eat with forks. Hands were made before tools, but lots of good tools are sold every year.

Double-Smile Service pays.

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#### Let Safe and Sane Credits Prevail

WITHIN the last year we have heard quite a bit about the wisdom of more sound time-sales policies on the part of automobile dealers. Doubtless the trade at large has materially improved its practices along this line and headway toward saner credits has been made—yet here lately there have been numbers of stories indicating more or less "slipping" and a weakening of the knees.

There is no more excuse for credit extensions exceeding twelve months on new cars now than there was six months ago.

If a limit of twelve months was good policy last year when such a limit was indorsed by leading finance companies, bankers, dealers and manufacturers—it is good policy today.

At the same time extensions are being liberalized in some instances where not long ago there was hope of an approach to safe standards if not their actual attainment.

The trade has been enjoying a good business and a period of good business might cause a dealer to let down the bars a little in the matter of credit. His receipts being larger than normally he feels he can take more chance, but in his departure from safe and sane practice he cuts down profits that otherwise would come his way and in the end is not so well off finan-

cially as he might have been. Also he gets into the swing of a bad habit that might eventually mean his ruin.

What these instances of "slipping" have to do with the "bad spots" found in the time sale situation we do not know but there might be a relationship and in some sections there are far too many repossessions.

Even when the demand for cars is good safe and sound credit policies should prevail.

Another thing about that "faint heart" stuff—it never "asked 'em to buy."

#### More Reconditioning Needed

NE of the noticeable features of trade reports received recently relates to the insistence of used car buyers for vehicles in good mechanical condition.

Out in California the used car which has not been reconditioned is said to be extremely difficult or next to impossible to move.

Word comes from Texas that buyers right now are demanding higher standards of mechanical fitness in second-hand vehicles than ever, while a correspondent from the southeast writes that the used car in poor mechanical condition is substantially a drug on the market. And thus they come.

The wave of price reducing possibly is responsible to a considerable extent for this situation, the used car buyer while willing to step up into a higher price bracket that he would have invaded before the cuts demands that the car he buys is in good fettle. Rather than accept a car in poor mechanical condition he will drop back into a lower price bracket for his used car or buy, in instances, a new car for the sum he intended to spend.

But the big reason for the situation probably will be found in the growing disposition on the part of used car buyers to want better products. A few years ago it was much easier to sell automotive junk in the guise of transportation than it is today. Junk has been getting constantly more difficult to dispose of and right now we simply are getting a loud expression from the buying public on this point.

All of which means that the automobile dealer will have to pay close attention to the quality of cars he receives on trades.

Reconditioning used cars promises to be a much more popular practice by automobile merchants in the future. Insistence by the buying public for high standards of mechanical fitness in the used car will propel us in that direction.

What the trade needs now is more reconditioning. Sell transportation mileage and put as much transportation mileage in each car as possible. That is what the buyers are demanding.

# Sales Are Booming Throughout U.S.

#### Exports Given Big Boost By Reductions in Prices

#### Dealers Meet Used Car Situation by Reducing Allowances on Trade-ins

PHILADELPHIA, Oct. 6.—Few signs of recession appear on the automotive horizon. Most of the large factories are holding production steadily to unusually high level for this time of year, and at least one large factory has been gradually speeding up for the last two or three weeks. Stimulated by price reductions and easy time payment terms, sales are booming in virtually all parts of the

Exports of cars and trucks, after a slight early summer recession, are again climbing, the figures for August showing a gain of about 100 per cent in unit numbers over the July totals. Lower prices have undoubtedly contributed to this gain, helping to boost the American vehicles over the foreign tariff walls. Several of the automobile and truck companies have expansion programs for overseas trade under way, and the industry as a whole is considering measures for better financing of sales abroad and for the reduction of distribution and delivery costs.

Several factories have announced plans for additions to their plant capacity, and this forecasts a period of unprecedentedly keen competition beginning later in the season. The year 1926 will be one of the hardest that sales departments have ever faced, because on them will fall the burden of keeping distribution up to the increased capacity of the plants.

A repercussion of the recent price cuts is being felt in the used car markets. Stocks of the traded-in and resold vehicles have been increasing in many of the important sections of the country, which to an extent is a normal seasonal trend; but the tendency is enhanced by the extremely attractive prices and terms on which the new cars can now be acquired. Dealers are frequently having to take losses to move their used car stocks, but on the whole they are meeting the situation in the best possible way—by reducing their allowances on trade-ins.

The public is showing an increasing disposition to demand only the best in used cars, insisting on models of good appearance and with essential parts rebuilt or placed in the best running condition.

#### ESTABLISH TIRE BRANCH

CHARLOTTE, N. C., Oct. 3.—Establishment of a branch of the Henderson Tire Company, of Cleveland, Ohio, in this city was announced here. T. H. Cline was named branch manager.

#### LUXOR ENTERS BUS FIELD

FRAMINGHAM, Mass.; Oct. 5.—The Luxor Cab Manufacturing Corp. has announced that it will enter the bus field in addition to its line of taxicabs. Plans are now under way for the launching of the Luxor "Utopian," including advertising, sales, production and delivery problems, investigation and mapping out of bus routes and launching of bus operating companies. The bus division will follow the policy established as regards Luxor cabs, that is, protect franchises given to its operating companies.

#### Champion Athletes Join Sales Force

ST. LOUIS, Mo., Oct. 5.—Terrell C. Peters, former roller-skating champion, Jules J. Wehrli, a high class tenpin bowler and Frank Mulligan a former soccer star have been added to the sales force of the Lambert-Graves Motor Car Co., Manchester avenue and Kingshighway boulevard, Ford and Lincoln dealer. The company seems to have a penchant for adding athletes of prominence to its sales force.

#### Hupp Six at Popular Price Soon to Make Appearance

DETROIT, Oct. 2.—A popular priced six-cylinder Hupmobile car which will act as a companion to the well-known eight-in-line model, will be illustrated and described in Motor Age at an early

According to the officials of the Hupp Motor Car Corp., the newcomer is of conventional design throughout, using the same quality of materials and identical standards of inspection as employed in the construction of the larger Hupmobile car. It is understood that the performance and riding qualities of the new model are very unusual.

#### OPEN GARDNER BRANCH

CHICAGO, Oct. 3.—The Gardner Motor Company, Inc., of St. Louis, has opened a wholesale factory branch at 2001 Michigan avenue, Chicago, in charge of Helm Walker, a well known Chicago automobile merchandiser.

In announcing this development in the distribution of Gardner cars, Russel E. Gardner, Jr., president of the Gardner Motor Company, states: "We determined to operate our own wholesale branch under experienced Gardner management to further assist our large dealer organization in the Chicago trading area in rendering Gardner owners the permanent and efficient sales and service facilities to which every automobile buyer is entitled. Our factory branch will carry a complete stock of parts, and warehouse Gardner cars for our dealers."

#### Kissel Co. Cuts List Price on Various Models \$100 to \$200

#### Four-Passenger Enclosed Speedster Also Is Added to Big Line Maintained

HARTFORD, Wis., Oct. 3.-The Kissel Motor Car Company has announced price cuts ranging from \$100 to \$200 on all six cylinder models except the five passenger brougham sedan and the five passenger brougham, and also price cuts on the eight cylinder enclosed two passenger speedster and de luxe victoria. In addition a four passenger enclosed speedster and a de luxe addition of the same model have been recently added to both the six and eight cylinder lines, the six cylinder and enclosed speedster being listed at \$2185 with the de luxe model selling at \$2685 and the eight cylinder enclosed speedster listing at \$2585 with the de luxe model selling at \$3085.

Equipment on these standard enclosed speedster models includes artillery wheels, rear view mirror and automatic windshield wiper. The six cylinder de luxe model is in addition fitted with spare tire, front and rear bumpers, shock bumpers and a clock. The eight cylinder de luxe speedster has artillery wheels, front and rear bumpers, snubbers, automatic windshield wiper, rear view mirror and clock included as standard equipment. All four models are upholstered in leather and are lacquer finished.

Following is a list of the models affected by the recent price cuts together with old and new prices.

#### Kissel 55

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Old	New
Model Price	
2-p. Speedster\$1898	5 \$1795
4-p. Speedster 1998	5 1895
2-p. Enc. Speedster 228	5 2085
4-p. Tourster 189	5 1795
5-p. Phaeton 168	5 1585
7-p. Touring 178	5 1685
4-p. Coupe 218	5 2085
5-p. Phaeton 228	
De Luxe Models	
2-p. Speedster\$218	5 \$2085
4-p. Speedster 228	
2-p. Enc. Speedster 278	
4-p. Tourster 208	
5-p. Phaeton 188	5 1785
7-p. Touring 198	5 1885
4-p. Coupe 258	5 2485
5-p. Brougham Sedan 268	5 2485
7-p. Sedan 328	
Berline Sedan 338	5 3185
Victoria 268	5 2485
Kissel 75	
2-p. Enc. Speedster\$258	5 \$2485
De Luxe Victoria 298	5 2885

#### AERIAL TAXI SERVICE

SAN FRANCISCO, Cal., Oct. 5.—An aerial taxi service is operated out of San Francisco, flying to Sacramento, 90 miles, in one hour, and to Los Angeles, 468 miles, in a little more than four hours. Cost of travel is 20 cents per mile per each passenger, provided two go in the same direction.

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#### Automotive Exports First Half Year in Big Increase

#### Forty Per Cent Over 1924 Period Puts Industry Second in Foreign Shipping

WASHINGTON, Oct. 5. — Exports of automobiles, parts and accessories by the United States for the first half of 1925 increased \$45,000,000 or 40 per cent over the first half of 1924, making the automotive industry rank second in exports, it was made known here in the semi-annual analysis of America's world trade by the Foreign Commerce Department of the United States Chamber of Commerce. Raw cotton was the leading export, increasing \$111,000,000 or 31 per cent in value and 737,000,000 pounds or 65 per cent in quantity.

It is further shown that during the first half of 1925 exports of motor trucks and buses increased from 14,571 to 23,296 or 60 per cent over the first half of 1924 and passenger cars from 80,293 to 118,174 or 47 per cent and automobile engines from 13,722 to 93,678 in number, or 583 per cent. Notwithstanding the increased domestic consumption of gasoline, American exports of the third leader, gasoline, naphtha and other light products increased \$8,400,000, or 9.5 per cent and 38,358,000 gallons, or 6.5 per cent in Another noteworthy increase quantity. in quantity though not among the 50 chief exports was tractors, gaining 47 per cent.

The analysis shows that the foreign trade of the United States as a whole took a jump during the first six months of the year, exceeding in value the total for the same period in any previous year except the war years of 1917 and 1918 and the post-war years of 1919 and 1920.

#### Farm Outlook Prompts Large Expansion Program by Pence

SIOUX FALLS, S. D., Oct. 3.—After inspecting the farm country in this state Harry E. Pence, president of the Pence Automobile Co., Minneapolis, Minn., distributor of Buick cars, forecast such a promising future agriculturally that he decided on a \$200,000 enlargement program, including a new lease on a \$25,000 building at Watertown, a new \$60,000 building at Huron, a \$65,000 structure at Mitchell, and a \$75,000 building here. Contracts have been let for the Mitchell and Huron buildings.

#### PEABODY GOES WITH VELIE

MOLINE, Ill., Oct. 5.—C. W. Hadden, general sales manager of the Velie Motors Corporation, has announced appointment of F. D. Peabody as district representative for Velie in the Pittsburgh district.

Mr. Peabody was for several years connected with the Studebaker Corporation in various sales capacities, and later with the Lally Light Corporation. For the past year he has been associated with the Chrysler sales organization, leaving them to assume his present responsibility.

#### Trade in Mexico Is On Upgrade

SAN ANTONIO, Texas, Oct. 5.— The automobile business in Mexico City is improving rapidly, according to reports from dealers in the capital of the republic south of the Rio Grande. The financial situation in Mexico is better than it has been for many years. Streets and roads are being improved and more inquiries are being made concerning automobiles.

William C. Benbow, distributor for the Dodge Brothers products in Mexico City was in San Antonio recently buying accessories, parts, tires, etc. He declared sales for all lines of machines represented in Mexico, are increasing. He said also, the outlook for trade is better than it has ever been. Mr. Benbow said most sales in Mexico are for cash or cash and paper which can be handled easily. Other members of the Mexican trade visiting San Antonio make similar reports.

#### HOLD TRACTOR SCHOOL

MEMPHIS, Tenn., Oct. 5.—The Memphis Branch of the Ford Motor Company has just held a school for Fordson tractor salesmen. C. E. Fawcett was the director. Road graders, scrapers, drag lines, street sweepers, trailmobiles, agricultural implements, and every piece of equipment used in this territory with a Fordson tractor were shown. One hundred and sixty-eight salesmen attended from points in Tennessee, Alabama and Mississippi, Arkansas, Missouri, and Texas.

#### OPEN NEW WHITE BRANCH

LOS ANGELES, Sept. 26.—Announcement is made here of the establishment of a direct factory branch in that city by the White Company. J. L. Sydnor, who has been attached to the Pacific coast headquarters of the company at San Francisco, heads the Los Angeles organization. The White Company has been operated through a dealership in Los Angeles for about fifteen years and has a large number of its trucks in service.

#### WILL MAKE METAL BODIES

FREMONT, O., Oct. 3.—Papers have been filed with the secretary of state chartering the Fremont Metal Body Co., with a capital of \$50,000 to manufacture metal bodies for automobiles. The incorporators are George D. Welles, Ray E. Zackman, Henry E. Saney, Frank A. Harrington and Charles Weinrich.

#### TO DO MANUFACTURING

AKRON, O., Oct. 3.— The National Steydford Co., has been incorporated with a capital of \$15,000 by Don E. Williams, N. N. Pollock, Clarence V. Cole, Edward Kohl and A. V. Burkhart to manufacture and will automobile parts and accessories.

#### Custom Coachwork Classics On Display in N. Y. Nov. 15-23

#### Say New Styles at Salon Will Tend Strongly to Brilliant Color Effects

NEW YORK, Oct. 2.—American and foreign custom coachwork makers will offer the latest products of their art at the twenty-first annual Automobile Salon to be held at the Hotel Commodore here Nov. 15-23. It is predicted that the new styles will tend strongly to contrasting colors in brilliant hues, rather than the combined and harmonizing shades that have come into general use of late years.

The carossiers exhibiting at the Salon are Blue Ribbon, Brewster, Brunn. Derham, de Causse, Dietrich, Fisher, Fleetwood, Holbrook, Judkins, Le Baron, Locke, Merrimac, Rollston and Willoughby. Nineteen chassis, representing six nations, will mount the custom bodies of the designers. They include Amilcar, Brewster, Cadillac, Cunningham, Duesenberg, Franklin, Isotta-Fraschini, Lancia, Lincoln, Locomobile, Marmon, Maybach, Mercedes, Minerva, Packard, Pierce-Arrow, Renault, Rolls Royce and Wills Sainte Claire.

A new rule of the Salon limits to twelve the number of chassis of any one make which may be exhibited.

# Gas Volatility Holds Well To Federal Specifications

WASHINGTON, Oct. 5.—Results of the twelfth semi-annual motor gasoline survey, recently completed by the Bureau of Mines, Department of Commerce, indicate that the average volatility of motor gasoline now being marketed throughout the United States falls well within the limit of Federal Government specifications. The investigators found that the average gasoline sold today is about the same quality as that sold in the summer of 1924. As would be expected, gasoline sold in the summer of 1925 shows a slight decrease in volatility as compared with the gasoline marketed last winter.

A slow but certain tendency towards uniformity among the various gasolines marketed has been manifested since 1917.

#### BUDD ERECTS NEW PLANT

PHILADELPHIA, Oct. 5.—The Edward G. Budd Manufacturing Co., of Philadelphia, through its subsidiary, the Edward G. Budd Manufacturing Realty Co., is erecting on Charlevoix avenue, Detroit, a plant for unholdtering and finishing a substantial proportion of the bodies made in its plant here. The new factory will employ about 2,500, and will have available for working purposes 336,540 sq. ft. of floor space. The structure, which is being built on a tract of eleven acres, will be four stories high, 725 ft. long and 100 ft. wide. The cost will be about \$1,500,000.

The Budd concern specializes in all steel bodies for automobiles.

#### Rubber Industry's Growth Is Reflected in New Buildings

#### About \$4,000,000 Worth of Factories to Be Completed Before End of 1925

AKRON, O., Oct. 5.—Physical evidence of the growth and prosperity of the automobile tire industry in the last few years is reflected in a report of construction activities just made public by the city building department.

Before the end of 1925 approximately \$4,000,000 worth of new factory buildings will have been completed or started by rubber companies in Akron.

Nearly everyone in the industry predicted two years ago that the city's excess factory floor space would not be occupied for the next 20 years. Today every inch of surplus space has been occupied, and the manufacturers are running new units and additions to completion.

A new \$2,000,000 warehouse will be completed by the B. F. Goodrich Co. about Nov. 1. It will be six stories high, with a basement. This will make Akron the central distributing point for tires and other Goodrich products, eliminating rented warehouses in the large cities. The company also is building a new branch office building here.

Construction has just been started by the Goodyear Tire & Rubber Co. on a five-story factory unit, which with equipment will cost more than \$800,000. The machine shop building, which was begun six years ago, but left uncompleted when the financial slump hit the industry, has just been finished, and is now occupied.

The General Tire & Rubber Co., completed additions to factory and office buildings, at an estimated cost of \$225,000. A heater unit is now being constructed, and plans are being made for a larger building program next year.

Three additions to its factory and warehouse units are being made by the Seiberling Rubber Co.

The Firestone Tire & Rubber Co., which ranks next to Goodyear in point of tire production, is building a \$350,000 warehouse and a \$50,000 heater unit.

The Miller Rubber Co. has completed this year factory additions valued at \$350,000. In the last three years the company has spent, entirely out of earnings, \$5,000,000 for new equipment and other factory improvements, according to officials.

#### HAWKEYE TO RESUME

DES MOINES, Ia., Oct. 5.—The Hawkeye Cord Tire Co., has been organized to take over the plant formerly operated by the Hawkeye Tire & Rubber Co., which has been in the hands of a trustee for some time. High pressure cords as well as balloons will be turned out by the plant when operations are resumed. Officials of the company hope to have production under way by October 15. John T. Christie and Bert Springer have been appointed temporary officers.

#### VISIT G. M. PROVING GROUNDS

DETROIT, Oct. 2.-Members of the Detroit section, Society of Automotive Engineers, and a number of their friends in the industry, were the guests for an afternoon and evening of the General Motors Corp. at the proving grounds maintained by the corporation at Milford, Mich. The afternoon was spent in witnessing tests of passenger cars to determine their hill-climbing capacity, maximum speed, fuel economy, braking efficiency and other characteristics. members later were guests of the corporation at a buffet supper served on the grounds. In the evening, O. T. Kreusser, resident engineer in charge of the proving grounds, read a paper on methods employed at the grounds in determining important characteristics of cars and accessories.

#### NEW POST FOR J. S. HUNT

NEW YORK, Oct. 5.—J. S. Hunt, general factory manager, Star Car Division, Durant Motors, Inc., has been appointed vice-president of Manufacturing of the Star Car Division, according to a factory announcement. Mr. Hunt's headquarters will continue to be at the Elizabeth plant.

#### MAKING FLOOD LIGHTS

COLUMBUS, O., Oct. 3.—The Madison Service & Sales Co., which has been operating as a partnership between Ralph Madison and S. G. Smith for the past year, for the purpose of manufacturing and selling automobile accessories, has been incorporated for \$15,000. The concern will retain its old quarters at 118½ East Long street. The company is now engaged in the manufacture of flood lights especially adapted to buses, trucks and touring cars.

#### Moon-Diana Head Enthused Over Foreign Trade Outlook

#### Germany Offers Especially Fertile Field for American Cars, Believes Stewart McDonald

NEW YORK, Oct. 5.—After ten weeks travel and observation of business conditions in Europe, Stewart McDonald, president of the Moon Motor Car Company and Diana Motors of St. Louis returned to this country greatly enthused over the outlook for American progress in the automobile market of Europe.

Mr. McDonald in his statements concerning the increasing use of American automobiles abroad augments the optimism in export trade conveyed by other prominent automobile manufacturers recently returned from Europe. Especially in Germany does Mr. McDonald see a remarkable fertile field for American cars. In his opinion England stands second only to Germany, from the standpoint of popularity of American made automobiles, he being greatly impressed by the growing use there of many well known American makes.

In discussing the progress of his own cars, Moon and Diana, Mr. McDonald estimated production for year at 15,000 cars including 5,000 Dianas. He further stated that production at his factories for September this year exceeded the same month in 1924 by 50 per cent and that for the first nine months of 1925 the Moon and Diana output exceeded that of the whole twelve months of 1924, the increase being largely due to the success of the new Diana eight. He considers outlook for future business, by far brightest in history of his company.

# 25 Years Ago In the Automobile Industry As Recorded In MOTOR AGE

(From Motor Age of Oct. 11, 1900)

#### Automobile Racing at St. Louis

Albert Champion and Kenneth Skinner proved the chief attraction at the Missouri State Fair in St. Louis, Thursday, Oct. 4. They were supposed to be on hand to help out the trotting races by enlivening the program, but the marvelous speed of their motor tricycles and the reckless skill displayed in their riding caught the unassembled St. Louisians agape and held them enthused during the afternoon.

#### Further Concessions in Boston

BOSTON, Mass., Oct. 8.—After considering the results of a public hearing held last summer the Boston park board has voted to grant the owners of automobiles further concessions than those already enjoyed, by extending the time within which motor vehicles shall be allowed to be driven in the park system an hour at each end. This means that automobiles may be run in the parks from 8:30 in the evening to 11:30 a. m.

#### The Motor Age Exhibition

The dates for the automobile exhibition, being promoted by the publishers of the Motor Age, are March 18 to 25, inclusive. The building where the exhibition will be held is the Chicago Coliseum, located less than a mile from the business center of the city and accessible by various lines of transportation.

#### Philadelphia's Big Celebration

PHILADELPHIA, Oct. 8.—To celebrate their victory in securing the passage of the ordinance to throw the park roads open to all classes of horseless vehicles and to demonstrate to the public the growth of automobiling, the officials of the Pennsylvania Automobile Club and of the Automobile Club of Philadelphia set apart last Saturday afternoon for a parade of self-propelled vehicles, and in order to make the exhibition more impressive, an invitation was extended to all "unattached" motorists to participate.

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#### Stutz Third Quarter Output Over Double 1924 Period

#### Chief Work of Last Six Months Directed at Rounding Out Distributing Organization

INDIANAPOLIS, Oct. 5.—A report covering third quarter production of cars by the Stutz Motor Car Company of America, Inc., shows that an increase in production has been made over last year's records of 213 per cent. The report also shows a marked increase in distribution with many strong new distributors and dealers added at impotant points.

"The work of the past six months," says president Fredrick E. Moskovics, "has been chiefly directed at rounding out the Stutz distributing organization, and we now have assurances that by the first of the year Stutz will be well represented in every important market in the country. During the same period we have made important forward strides in Stutz production methods and are now in a position, both from a production and a distribution standpoint, to do a greater business in 1926 than has ever been known in the history of the organization.

"Today we hear a great deal of the economies effected in the production end of the automobile industry. A recent report of one of the leading manufacturers states that they were producing as many cars with 11,000 men as were formerly produced with 17,000 men on the pay-roll. Another manufacturer has claimed a reduction of one-half in men employed with production figures for the smaller group exceeding those of the larger.

"While we feel that there are many economies being effected in manufacture, we at the same time believe that the greatest ecenomies of the future are going to be centered around the problems of distribution. Our policies include no sacrifice in design, materials or workmanship for Stutz cars. In fact we contemplate making Stutz cars better than ever before, but we are vitally concerned in new policies in relation to sales, the used car problem, distributors overhead and wasteful advertising and sales expenditures which have steadily increased the cost of selling.

"We believe the buyer of the car is more interested in saving from the cost of selling than he is in saving at the cost of production expenditure. Every dollar that is wasted in distribution must be paid by the buyer of the car. We believe our distributing policies, without sacrifice of profit to the dealer and distributor will make important savings to the buyer. Our present distribution organization, including our six branches in the larger cities and established responsible distributors and dealers at other points is reflecting a policy 'helping the owner to buy,' rather than going into high pressure sales methods. And on this basis we anticipate a shortage of Stutz cars in the coming months even in view of our plans for larger production."

#### LARGE AUTOMOBILE DISPLAY

PHILADELPHIA, Oct. 3.—Exhibits of motorbuses, parts and equipment will be larger than ever before at the show held by the American Electric Railway Association in connection with its 44th Annual Convention at Atlantic City, October 5-9. Over 200 manufacturers have taken over 100,000 feet of space, and of this 40 per cent will be occupied by bus manufacturers and the companies making parts and equipment for the motor coaches.

#### PAIGE-DETROIT PROFITS

DETROIT, Oct. 3.—Paige-Detroit Motor Car Company announces that its August profits, including all branches but before preferred dividends and taxes, amounted to \$532,281.48. Profits for the first eight months of 1925 were \$2,634,186.06. The cash resources of the company as of Sept. 27 were \$5,429,000. President Harry M. Jewett declares that the outlook for fall business is very favorable, and that the improved models announced in August at reduced prices have been eagerly received by the trade and the public.

#### Percy Owen Drops Federal Post to Join Dodge Brothers

DETROIT, Oct. 3.—Percy Owen, chief of the automotive division, United States Department of Commerce, joined Dodge Brothers, Inc., Detroit, Oct. 1 as director of foreign sales. Announcement of Mr. Owen's appointment was made by F. L. Sanford, general sales manager of the corporation.

Mr. Owen is known throughout the United States and abroad for his long and important activities in the automobile industry and as an official of the Department of Commerce. His entry into the automobile industry dates to 1899. For twelve years he was dealer, branch manager, importer and eastern sales manager for Winton, Bianchi (Italian) and Chalmers cars. In 1912 he became general sales manager and director of the Chalmers Motor Car Co., Detroit. In 1915 he was vice-president of the Saxon Motor Car Co. and from 1916 to 1924 was president and general manager of the Liberty Motor Car Co.

At this time he joined the Department of Commerce and in the capacity of chief of the automotive bureau, has served on a number of important commissions.

#### MEMPHIS BUSINESS GOOD

MEMPHIS, Oct. 5.—September, despite unprecedented heat, has presented good activity in the automobile trade. The Ford Motor Co. that was closed down awaiting new models is resuming and in a short while will be running full capacity. This has stimulated somewhat interrupted accessory trade which also waited after a fine spring and summer activity. Automobile sales, parts, service, garage and affiliated departments are very active. A number of new cars have been placed on this market and a number of the concerns have enlarged their places.

#### Daily Auction to Feature Chicago Used Car Exhibit

#### Thirty-five Dealers Will Participate in Big Display and Market Oct. 10-18

CHICAGO, Oct. 5.—Finishing touches are being put on arrangements for the Seventh Annual Used Automobile Show, which will be held at the Chicago Coliseum, Oct. 10-18. There will be 35 exhibitors this year and it is announced that all available space in the big exhibition building will be occupied.

The most interesting new feature added to the show this year will be a public auction to be held every evening in the Coliseum Annex. Here cars will be sold under the hammer and it is promised that many big bargains will be "knocked down" to highest bidders. The show usually is well patronized by the public, but it is believed the auction will draw an attendance of larger proportions than at any of the earlier used car displays.

Only "tested and approved" used cars bearing the green tag of the association will be shown on the floor of the Coliseum, thus assuring the purchaser that the car he buys is in good condition. To obtain this "tested and approved" green tag an automobile must undergo a rigid examination by an impartial committee of experts, after which it is priced by an Appraisal Committee, made up of used car managers who know the market value of all such machines. In this manner the association strives to protect the buyer and it is by strict enforcement of rules upholding the integrity of the green tag that the association hopes to perpetuate the annual used car mart and maintain the confidence of the public.

Inspection of cars to be shown at the Coliseum now is under way. Hundreds of "tested and approved cars" will be offered for sale on the floor and put on the auction block.

Following is the committee which is in charge of the exhibition and sale: Chairman, W. E. Butler, Franklin-Butler Motors; George C. Norwood, Thomas J. Hay, Inc.; Gordon Bird, Bird-Sykes Company; Harry P. Branstetter of H. P. Branstetter, Inc.; H. A. Wehmeier of Community Motors, Inc.; O. G. Heffinger, Chicago Motor Car Co.

#### FORD CLINIC HELD

COLUMBUS, O., Oct. 5.-A service clinic was held at the salesrooms of the Miller-Van Horn Co., local Ford dealers recently. This was attended by approximately 35 Ford dealers and some 20 authorized service station men, all located within a radius of 35 miles of Columbus. The clinic was under the supervision of factory engineers from the Columbus branch of the Ford Motor Co. and was held with the purpose of assisting Ford sales and service dealers in rendering more satisfactory service. Factory experts demonstrated the most efficient use of modern shop equipment in the furnishing of genuine Ford service.

#### Milwaukee Sees Last Half Ahead of First Six Months

#### September Outstanding From Sales Standpoint With Delivery Only Problem

MILWAUKEE, Oct. 3. — Predictions made earlier in the year that motor car sales in Wisconsin for the last half of 1925 would be equal to or in excess of sales for the first six months of the year appear at this time to be almost certain of fulfillment. Retardation of sales from now on will come principally from manufacturers unable to meet distributor demands with adequate production schedules.

Following an August business satisfactory in all respects, car retailers in Wisconsin hit a stride in early September which promises to make that month an outstanding one in sales. Inability to obtain cars hampered September sales to some extent, but most distributors kept pace with retail sales during the month.

New car registration in August of this year exceeded registration for August, 1924, by 225, figures being respectively 5,995 and 5,770. Milwaukee county accounted for more than 60 per cent of this increase, its contribution to the excess being 146 new cars. Extended comparison of August sales this year with July sales this year and August sales last year with July sales last year reveals a loss, however. This was due, not so much to any tendency as to the unusually good sales in July of the present year.

Time payments are being met promptly and distributors and dealers point out that if payments are made as well during October as they are being made now, it is safe to assume that the financial rating of the average citizen is most excellent. October with its fuel and winter apparel obligations to meet is usually a crucial month for automobile credit men.

#### Mail Course School Hit in Trade Commission's Ruling

WASHINGTON, Oct. 5.— Using the name "Chicago Auto Shops" as a trade name for the business of conducting a correspondence course in the repair of automotive vehicles was denied B. W. Cooke, C. E. Wesch and Job-way Home Study, Inc., all of Chicago, in a cease and desist order issued by the Federal Trade Commission which alleges this group has been guilty of unfair methods of competition. The order also denies the company from using the name "Associated Drafting Engineers."

The order also sets forth that the company must cease making the following representations to prospective automotive students:

"That any person, regardless of age or the amount of schooling or education he has had can and will within the period of one year be qualified as an expert in all matters pertaining to the repair of 39,733 Persons Are Drawn by Stunt

CINCINNATI, Oct. 3. — E. S. Gahagan, proprietor E. S. Gahagan Company, Eight and Broadway, Studebaker distributors, reported that the recent endurance test of a continuous drive of 100 hours and one minute of a Studebaker Six had attracted 39,733 persons to his show rooms by actual count from about 6 to 11 p. m. He said the test was the best advertising he has ever done and had given his sales a very substantial boast.

automotive vehicles by taking the correspondence course offered.

"That pupils who take the course of instruction in the repair of automotive vehicles are generally able to secure positions as superintendents or other executive officers at salaries ranging from \$75 to \$200 per week and from \$3,000 to \$10,000 per year.

"That there is a great demand for persons who have completed respondents' correspondence course in automotive repair."

#### DINES DODGE BROTHERS DEALERS

ST. LOUIS, Mo., Oct. 5.—Phillips Motor Co., Dodge Brothers dealer opened its new building at Lockwood and Summit avenues, Webster Groves, on October 1 with a dinner for 150 Dodge Brothers dealers in the St. Louis territory, a parade, a reception and a dance.

The Phillips Co. has been handling the Dodge Brothers car in Webster Groves for seven years, formerly having been located at 720 Big Bend road.

The cost of the new building was approximately \$125,000.

#### SCOTT LEAVING OLDS

LANSING, Oct. 3.—I. J. Reuter, president of the Olds Motor Works, has announced the resignation of John M. Scott as factory manager. Mr. Scott has been factory manager for several years and has resigned to obtain a rest. He will leave soon on a six months' tour around the world. J. J. Carter has been named to succeed Mr. Scott. He has been assistant factory manager since coming to Lansing with Mr. Reuter, at the time the latter assumed the presidency of the Olds works.

#### LINSLEY HEADS SALESMEN

DETROIT, Oct. 1.—D. R. Linsley of Chicago, was elected president of the Packard Master Salesmen's Association at the annual convention of the organization just closed here. More than 300 salesmen, picked after a sales contest as the star Packard salesmen of the entire country, attended the convention. In order to render a better service to prospective purchasers and to persons to whom they have sold cars, the master salesmen were taken for a three-day tour of the factory, to study manufacture, sales and service.

#### New Light Six Car in Lower Price Class Planned by G. M.

#### Unit Will Be Companion to Oakland and Produced at Plant in Pontiac

PONTIAC, Oct. 3.—A new light six passenger car to sell at a price ranging between the Chevrolet and Oldsmobile, somewhere between \$700 and \$800, will be built by General Motors at the Pontiac plant of the Oakland, it was announced by officials of the corporation.

It is possible that the new product will be exhibited at the New York show in January, but production and delivery is not expected before spring.

Two years of experimenting have resulted in the completion of plans for the new car. Production of about 60,000 cars is expected the first year after its introduction. The name of the new car will not be announced until later, it being understood that the name will be selected through an advertising campaign, in which the public will participate.

The heavy production that Oakland has maintained this season has retarded the introduction of the new car, as the new product will be built in the Oakland plant and is announced as a companion car to the Oakland.

Manager A. R. Glancy of the Oakland plant announced that about \$3,000,000 will be expended in the introduction of the new car and in preparation for its manufacture. Oakland dealers throughout the country will be authorized to handle the new car.

The new car will be equipped with a Fisher body, but all other specifications are to remain a mystery until the car is shown about the first of the new year.

#### Fifty Buyers Out of 2054 Who See New Ford Models

OAKLAND, Cal., Oct. 5.—Don Neher, Ford dealer here, kept actual count of the number of visitors at his showrooms for the first 24 working hours after the arrival of the new Ford models, and found that 2,054 persons came through the doors to see the new cars. This number of spectators produced fifty orders for cars. The crowd started to come within half an hour after the first of the new models had been placed in the showroom.

#### **BUSINESS AHEAD OF 1925**

ST. LOUIS, Oct. 3.—The McQuay-Norris Manufacturing Co. reports that business so far this year has shown an increase over the corresponding period of 1924, with the exception of February, which was a few hundred dollars below the same month of last year. The increase has been distributed well, with the piston and pin plant at Connersville, Ind.; the piston ring plant at St. Louis; and the bearing plant at Indianapolis all sharing.

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#### Balloon Tire Sales So Far in 1925 Over Twice 1924 Volume

#### Rise of Low Pressure Design in Favor of Automobile Owners Has Been Rapid

AKRON, O., Oct. 5.—Although there has been some falling off in balloon tire production during the past two months, sales of balloon casings so far this year have been twice those for the entire year of 1924, it is estimated by leading rubber manufacturers.

In the past two years the popularity of balloon tires has grown by leaps and bounds. They have gained the favor of the public in a shorter time than did the cord tire in comparison with the fabric casing.

Less than two years ago only a few high priced automobiles were equipped with balloon tires. Now practically all new cars, including Fords, are sold with balloons as original equipment.

Until July of this year, the proportion of balloon tires over high pressure pneumatics had grown steadily larger. In that month, however, balloon casing production fell from 1,729,121 in June to 1,561,806, according to figures just compiled by the Rubber Association of America, Inc. Inventories increased from 1,527,629 to 1,654,629.

Production of high pressure pneumatic cord casings gained from 1,994,704 to 2,181,645, inventories decreasing from 2,870,827 to 2,502,056.

Several large manufacturers in the Akron district are taking steps to practically eliminate fabric tire production.

Better methods of construction which lengthened the life of balloon tires have helped to increase their popularity, it is pointed out

#### SAM L. CHORLINS DEAD

ST. LOUIS, Mo., Oct. 5.—Sam L. Chorlins, formerly president of the State Tire

Co., and vice-president of the Associated Tire Dealers of St. Louis, died here recently. Mr. Chorlins had given up his connection with the tire industry and had planned to go to Florida. Before leaving for Florida he entered a hospital for an operation for appendicitis. Complications followed and he died.

Many tire dealers attended his funeral and Robert E. Lee, manager of the St. Louis Automobile Dealers' Association delivered the funeral oration.

#### New Models Bring Increase Ford Ford's Weekly Pay List

DETROIT, Oct. 5.—As a barometer of the popularity of the new Ford models, the Ford Motor Co. cites the increase in enrollment for the Ford weekly purchase plan. During the last ten days in August, enrollments totaled 13,167 and in the following ten days, the first in September, the number of new purchasers under the plan reached a total of 16,054.

All those who enrolled under the plan at the time the new cars were announced, benefited by the change, for they will receive the new types and be given preference as to delivery.

More than 175,000 are now enrolled under the plan and with others coming in at the rate of 1,600 a day, it is expected that the enrollment list will reach 200,000 within a short time.

#### 63 PER CENT CLOSED CARS

DETROIT, Oct. 3.—Sixty-three per cent of all cars sold by General Motors in August were closed models, the corporation announced today. This total compares with 40 per cent in August, 1924, 30 per cent in 1923 and 31 per cent in 1922. This comparison includes Chevrolet, Oldsmobile, Oakland, Buick and Cadillac, and as these makes represent practically all price classes, the corporation considers the figures for them representative of the trend toward closed cars in the entire industry.

# Customers Wait And Texas Dealers Clamor for Cars

#### Almost Unprecedented Situation Is Found in New Vehicle Market for Lone Star Trade

DALLAS, Texas, Oct. 5.—Dealers of standard makes of medium priced automobiles in Dallas and most cities of Texas, are clamoring for shipments from distributors and factories while long lists of customers continue to wait week after week for new models they purchased some time ago.

The situation in this territory with reference to new cars is almost unprecedented. Business has been improving from month to month. In many instances the dealers are 100 to 200 cars behind on deliveries, and some of the sales have been made 60 days.

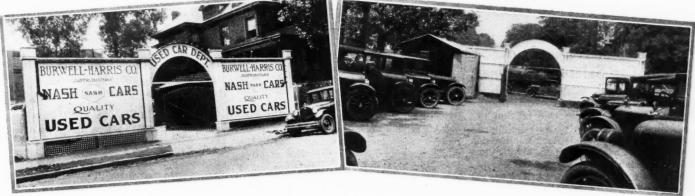
One dealer in Dallas said he was more than 100 deliveries behind and had been trying to borrow cars from agencies in five different places to make good delivery promises, but to no avail. Another dealer, 200 deliveries short, said he could use 20 car loads of new cars right now. Other stories are about like these.

But while the new car business has been setting new records the used car boogy involved practically every new car sale. While the dealers were generally badly understocked on new cars they were woefully overstocked on used cars.

#### ETTINGER TO WISCONSIN

DES MOINES, Ia., Oct. 5.—E. H. Ettinger, who for several years has been connected with the sales department of the Iowa Alemite Co., has been promoted and transferred to Milwaukee, where he will serve as assistant manager of the Alemite Lubricator Company of Wisconsin, a factory branch of the Bassick Manufacturing Co.

# "Slicking Up" the Used Car Lot Is Something Many Dealers Neglect—But Not in This Case—And It Is Paying Dividends



Here is a "slick up" idea for dealers who would dignify and beautify the usually unattractive Used Car lot. The Burwell-Harris Company, Nash distributors in Charlotte, N. C., erected this handsome combination gate and billboard at the entrance of the property in the rear of its building. It attracts considerable attention and many prospective customers. On the inside of the Burwell-Harris Used Car lot the cars are arranged as if they were in a display room. The prices are plainly marked—but not smeared in ugly whitewash all over the windshield of the cars. In fact, this department is operated with the same high standards that govern the policies of the new car salesroom

#### Los Angeles Merchants Hold Second Big Closed Car Salon

#### Forty Motor Vehicle Models Representing Many Makes on Display at Hotel Biltmore

LOS ANGELES, Oct. 3.—All space available for the second annual closed car salon to be held at the Hotel Biltmore, Los Angeles, during the four days commencing Oct. 6, under auspices of the Los Angeles Motor Car Dealers' Association, has been assigned. Forty enclosed passenger cars, representing as many different makes, will be displayed.

Last year the salon was held in March and proved a marked success, with an attendance of 20,000 people, but President Robert S. Breyer this year believed that holding the event in the fall would stimulate more actual buying than in the spring.

The committee in charge of the show includes Lynn C. Buxton, Stearns-Knight distributor, chairman; J. S. Woollacott, of the Harold L. Arnold Company, Lincoln dealer, and H. E. Woodward, general manager of the Reo Motor Car Company of Southern California, and Burt Roberts, executive secretary of the dealer association.

Musical entertainment will be provided for the afternoon and evening sessions.

#### OFF TO EUROPE

DETROIT, Oct. 3.—Don S. Devor, vice-president in charge of manufacturing of the Timken-Detroit Axle Co., Mrs. Devor, Matthew B. Morgan, chief engineer and Mrs. Morgan, have sailed from New York for London. They will return early in November. Mr. Devor is also a director of the Timken-Detroit company and it is the intention of the two officials of the company to visit the principal automobile, truck, bus, axle and gear manufacturing plants in England and the Continent to observe methods and designs, particularly in bevel and worm gearing.

The itinerary of the party includes Paris, Brussels, London, Geneva, Interlaken, Lucern, Vienna, Berlin and Antwerp. They will attend any automobile, truck or bus shows that occur while they are in Europe.

#### Price Reductions Speed up Car Sales in Carolinas

CHARLOTTE, N. C., Oct. 5.—Out of conditions which caused apprehension in the automotive trade in this section of the country has come a well balanced and well distributed fall demand that is serving as the basis optimism. New car sales are brisk due largely to the cut in prices. Many of the dealers in the Carolinas are complaining of slow deliveries. The price cuts in most lines came when dealers' stocks were low. The used car situation is satisfactory, and the demand for light used cars is brisk. Extreme difficulty is being experienced in selling used cars in poor mechanical condition.

#### To Teach Salesmen Public Speaking

ST. LOUIS, Mo., Oct. 5.—A class in public speaking for its salesmen has been established by the Southwest Nash Motor Car Co., St. Louis Nash distributor. It is believed by the company that a salesman who is able to deliver a speech before an audience acceptably will be able to handle situations which arise in handling a prospect with more ease.

It is planned to make the school a feature of the regular Monday evening meetings which were resumed recently after having been discontinued during the summer. English literature and grammar will also be taught.

#### Indiana's Registrations Take 15 Per Cent Drop in August

CHICAGO, Oct. 3.—Statistics covering registration of new passenger cars in Indiana during August reveal that there was a drop of 15 per cent in the total as compared with the preceding month. Fords declined the sharpest with a loss of 34 per cent, due probably to the disposition of buyers to await developments concerning the new models. Low priced cars (excluding Fords) were off 4 per cent; there was a gain of .8 of 1 per cent in the medium priced division while high priced vehicles showed a gain of 10 per cent over July.

Following are the detailed figures for the first eight months of 1925:

	Lo	w excl			
Month	Fords	Fords	Med.	*High	Total
Jan		1,024	1,837	117	7,217
Feb	3,515	896	1,533	103	6.047
March	5,778	2,042	4,031	205	12,056
April	5,002	2,292	3,641	243	11,178
May	4,819	2,205	3,413	175	10,612
June	4,176	1,982	2,920	153	9,231
July	4,314	1,965	3,245	164	9,688
Aug	2,816	1,868	3,274	181	8,139

Total ....34,659 14,274 23,894 1,441 74,168 \*Includes miscellaneous cars not named.

The foregoing statistics were compiled from figures furnished to Motor Age by Indianapolis Auto Trade Association, Indianapolis, Ind.

#### 35 STAR DEALERS AT MEETING

SACRAMENTO, Cal., Oct. 5.—The sales convention for 1925 drew 35 Star dealers to this city, for a meeting presided over by H. W. Curtis, director of sales and branches of the Durant Motor Company of California. The session was for one day, and the W. I. Elliott Star Company of Sacramento acted as hosts to the convention at luncheon. The meeting was such a success that the dealers voted to have another similar convention here in October. Star dealers from all sections of northern California attended and heard Mr. Curtis present the Star Gold Certificate Plan, and several salessystems that he has tried out successfully in different retail branches.

# Production Capacity of Ajax Factory Will Be Doubled

#### Demand for New Nash Product Necessitates Enlargement of Factory Facilities at Racine

RACINE, Wis., Oct. 5.— Production capacity of the factory of the Ajax Motors Company is to be doubled in response to demand for the Ajax Six and active work preparatory to the installation of new machinery has already begun.

This announcement, coming as it does four months after the first Ajax was run onto the loading dock for shipment, is submitted by the company as evidence of the enthusiastic manner in which the public has received the new Nash-built car. Coupled with word regarding production expansion, it has been made known that Ajax Motors celebrated its fourth monthly "birthday" in the shipment of the 5,000th car to leave the plant since May 26 when the first Ajax was shown to a group of dealers.

"While it was felt, before actual production on the Ajax had begun, that demand for the car would be unusually heavy, I am frank to say that we did not anticipate public acceptance of so sweeping a character," said D. M. Averill, vicepresident and general manager of the Ajax Motors Company. "With the opening of new dealer points, factory production has been increased to meet shipping schedules, but the demand has grown in proportions greater than our present facilities can supply, so we have literally been forced to prepare for doubling production considerably sooner than our original plans called for. When the Ajax Motors Company was organized it was Mr. Nash's fixed policy that nothing be left undone which would make the Ajax a quality product in every sense, and that production should be increased only as actual public demand for the car made greater volume necessary. And that is precisely the plan we have followed."

The program as carried out provided for limited production at first and as the cars passed into the hands of owners, their character of performance was closely checked by the dealer and by the factory. Production increases, on a careful basis, have been made from time to time until volume reached the point where the necessity of increased plant capacity was apparent.

#### 41,500 Chevrolet Dealer Deliveries Made in August

DETROIT, Oct. 5. — The Chevrolet Motor Co. reports that a new record has been set in deliveries to Chevrolet dealers during August. A final check of August deliveries places the figure at 41,500, a larger number of cars than the company ever has placed during any preceding August.

This figure exceeds deliveries made in either June or July of this year.

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#### Californians Demanding Rebuilt Used Cars

#### "As Is" Second Hand Vehicle Especially Hard to Move

#### Resale Business From Oregon Line South Caught in Complex of Unusual Problems

SAN FRANCISCO, Cal., Oct. 3.—Aside from stimulation of sales, in which they have been a considerable factor, recent reductions in new car prices have had several most interesting effects on the merchandising of used cars in California from Santa Barbara northward to the Oregon line.

Used car stocks in the hands of dealers of new cars have been increased materially; the demand for rebuilt used cars has increased to a point at which it is almost impossible to sell a second-hand car as is; credits for used cars turned in as first payments on new car purchases have been reduced to what appears to be about the minimum; dealers in new cars are endeavoring to take in only used cars of the makes they sell; dealers who handle used cars only are having rough going; and a large number, probably more than half, of the "wild-cat" used dealers in central and northern California have been forced out of business, in some instances, particularly in the smaller cities and towns, leaving the banks holding the sack.

In addition to these conditions, a number of used cars, none of them rebuilt and few of them of little account as to transportation or appearance, have been scattered over this section of the state as a result of auction sales held hurriedly in an effort to realize something on the stocks of the used-car dealers who have gone out of business. This is not so good. The closing out of the "wild-catters" is a decided benefit to the general automotive merchandising industry all up and down the coast. Time alone will tell how the other newly introduced factors in the used-car situation here will work out.

#### Take in More Used Cars

Dealers in new cars have been compelled to take in more used cars on sales of new ones because of the great stimulation of demand by the recent price But the dealers, almost unanimously, have been allowing from 15 to 50 per cent less for these used cars than they did prior to the reduction in newcar prices. This means that, though the stocks of used cars in the hands of the dealers in San Francisco, Oakland, Sacramento, Fresno and other towns in this section, are probably larger on the average than they ever have been before. the amount of dealers' money tied up in these cars is only from 60 to 65 per cent of what it was at this time last year. It should be said in connection with this situation, that the months of September and October in this part of California are usually good passenger-car sales months,

due to the influx of large sums of money in payment for the annual fruit crop.

Time on deferred payments on new cars has been extended in this section from the former usual 12 to 15 months, to 18, and, in some cases, 24 months. But the dealers who take in used cars on these new car deals are standing close together in an effort to hold down the deferred payments on such transactions to 12 to 15 months and no more. One of the results of this method, which is being generally accepted by the public, is that the dealer can then sell the used car he has taken in for cash on a very small margin and still come out in the

#### Milton Buys Two Little Peugeots

PARIS, Sept. 19 (By Mail)—When Tommy Milton boarded the French liner France for his return home after visiting and racing in Europe he had among his effects two Peugeot runabouts of a type common in France, having a four cylinder engine of only 40 cubic inch piston displacement. While in Europe Milton was impressed with the results obtained with small automobiles. He selected the Peugeot, which has a track of 37 inches and a wheel-base of 89 inches, as being the smallest of Europe's diminutive cars.

clear. Or, he can sell this used car on a smaller down payment and longer time in the deferred payments, at a lower rate of interest, than he has been selling used cars in past years.

#### 18 Months on Rebuilts

Reputable dealers in San Francisco and Oakland are selling good rebuilt used cars for down payments of \$50 to \$100, on time as long as 18 months, and at interest as low as six per cent. This is a lower interest rate than the buyer can obtain at a bank, and the dealer who is in a position to finance his used-car deals, or to have his financing done by his bank at 5½ to 6 per cent—as is being done here—is making some money on his used cars, largely due to the general reduction in factory prices on new cars.

Another interesting result of this price reduction is that more used cars are being rebuilt than ever before in the history of the industry in this part of the Pacific coast. At least 85 per cent of the dealers of the larger cities of this section are taking in almost no used cars except of the makes which they sell new, and then are rebuilding them, and selling them on a purely transportation basis.

There has been a very material in-(Continued on page 43)

#### Foreign Trade to Be Topic at N. A. C. C. Fall Conclave

#### Drawings for Space at New York and Chicago Shows Also to Be Held

NEW YORK, Oct. 3.—Looking forward to 1926 as a new era in the export of American cars and trucks, the National Automobile Chamber of Commerce will have foreign trade as the chief topic of its annual fall meeting at its New York offices on October 8. The drawing for space for the National Automobile Shows at New York and Chicago will be held on the afternoon of that day.

The shows will take place at the Grand Central Palace, New York, January 9-16 and at the Coliseum, Chicago, January 30-February 6.

"We are trying to work for better motor travel conditions throughout the world," said John N. Willys, chairman of the foreign trade committee of the automobile organization, commenting on the program. "We want the foreign makers to get their share of the market. There is plenty of room for all. The problem is not what makes of cars will be sold, but rather how to improve roads, lower taxes, provide financing and get uniform regulations which will make motor travel readily available for all."

Preliminary details of the second World Motor Transport Congress, New York, January 11-13, will be made at this meeting.

#### Chandler Reduces Prices From \$100 to \$505 on All Models

CLEVELAND, O., Oct. 2.—Price reductions ranging from \$100 to \$505 are announced by the Chandler Motor Car Co. New prices compared with former ones and the amount of reduction are as follows:

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duction
8505
*
400
400
350
100
100
140
4 4 3 1

#### CLIPS DE PALMA'S RECORD

TANFORAN, Cal., Oct. 5.—Frank Lockhart, driving a Miller Special, did the mile on the Tanforan track recently in 46 2-5 seconds, or two-fifths of a second lower than De Palma's record. Lockhart also took the 35-mile free-for-all.

## 23.X

# Along Automobile Row



DENVER, Colo.—Boyle & Blunt, Inc., Denver Lincoln dealers, announce appointment of L. G. Murphy, formerly with the Wyoming Trust Company of Casper, Wyo., as sales manager.

MASON CITY, Ill.—W. A. Shipp has sold the Midway Garage here to George O. Zimmerman. The new owner is distributor of the Dodge Brothers car and Hart-Parr tractor at a plant on Tonica Street and has moved to the Midway Garage plant on South Main, a much larger building. Mr. Shipp's plans are not yet announced.

GOLDSBORO, N. C.—The Goldsboro Knight Company, of which Edward G. Goodwin is president, obtained the dealership for Willys-Knight and Overland passenger cars. The Odom Motor Company has closed a contract for the Nash dealership.

WATERLOO, Ia.—The Osbun Motor Corporation, Studebaker dealer in this district, celebrated its first anniversary and the opening of the Waterloo division's new quarters, at a banquet at which 40 members of the Waterloo and Cedar Rapids branches attended. Harold Plumb of the Associated Manufacturing company presided; A. C. McCormack, Cedar Rapids agency, B. M. Osbun, president of the firm; and Harry Padden, Waterloo head salesman, spoke.

FARGO, N. D.—J. C. Vincent & Co., distributors of Dodge Brothers cars have bought the Emerson Brantingham building from the Emerson estate for \$140,000. The tire company will continue to occupy the east half of the building until the Emerson Brantingham lease on two floors expires in 1928. The Fargo Battery Co., will remain as a tenant. The building is 3 stories, concrete, 150x175, with a 45 ft. concrete platform on trackage. The site is 150x205.

CLEVELAND, O. — Berichon-McGhee, Inc., is the name of a new Ford agency in this city. Mr. Berichon has been connected with the industry since 1905. Mr. McGhee has been engaged in the automobile financing business.

LOS ANGELES.—W. D. Dunham, for 17 years connected with the Ford trade, has purchased the business of J. E. Coberly Company, Los Angeles Ford dealers, for years one of the largest merchandisers of Ford products in the west.

CINCINNATI, O.—The Max R. Miller Co., distributors for Willys-Knight and Overland cars at 1010 Gilbert avenue, has obtained a long term lease on the new stone-front Hake building at 2400 Gilbert avenue. The Miller Company will install increased service facilities.

PORTLAND, Ore.—The W. R. Cate Motor Company, Hudson-Essex dealer, has opened another retail store, used car showroom and service shop on Portland's east side. This new store will be operated in addition to Cate's original location at East Forty-second Street and Sandy Boulevard, and will be under the supervision of Arden Fugate. Mr. Cate will devote his personal attention to the new store.

INDIANAPOLIS, Ind.—The Miller Robinson Motor Company has been organized here to distribute the Oakland car in central Indiana. G. P. Miller is president; W. M. Thompson, the latter of Milwaukee, Wis., is vice-president; and W. J. Robinson, secretary-treasurer. The latter has been with the Oakland organization at Milwaukee since 1920. Mr. Miller has been with the Nash Sales Company of Milwaukee.

CINCINNATI, O.—Robert Sloan, president of the Robert Sloan Motor Company, Chrysler distributors in the Cincinnati territory, announced appointment of the Westwood Auto Sales and Service Company, at 3000 Harrison Avenue, as Chrysler dealer at Westwood, Ohio.

BELVIDERE, III.—Franklin W. Bauer of Rockford has purchased the Triangle garage here from Andrews & Beckington for \$50,000 but possession will not be

given until Nov. 1. The retiring owners have been in the garage business here for the past ten years.

CHARLOTTE.—The Locomobile Company of Western North Carolina has received its charter of incorporation with an authorized capital stock of \$40,000 of which \$2,500 has been paid in by J. E. Erwin of Morgantown; T. G. Mosley and J. C. Blanke of Charlotte. The company will take over a building at 500 North Tryom Street. Mr. Erwin is president, Mr. Mosley vice-president and general and Mr. Blake secretary-treasurer of the new company. The sub-agency at Winston-Salem will also be shifted to handle the Locomobile.

CEDAR RAPIDS, Ia.—Frank Weisbard, senior member of Wiesbard Bros., local Ford dealers, has purchased the brick building, 74 by 66 feet, adjoining the Weisbard station on the north. It will be remodeled for sales and service, the two buildings being thrown into one. The firm now has 132 foot frontage on both Washington and Second Streets.

CINCINNATI, O.—The Cincinnati Auto Specialty Company, 312 Main Street, has been named agent for the Southern Ohio and Northern Kentucky territory by the manufacturers of the Wedford automatic curtains.

BLYTHEVILLE, Ark.—The Jackson Motor Company of Blytheville, will represent Durant Motors, Inc., as selling agents here in the future. The company has discontinued Chevrolet.

NEW ORLEANS, La.—The United Motor Car Company, Inc., distributors of Hupmobile in the New Orleans territory and local dealers, now located at 718-721 St. Charles Street, secured the Go-Ro building at 4049 Carrollton Avenue, for a consideration of \$90,000. The building at covers a frontage of 99 feet on Carrolton Avenue and a considerable part of the 324 feet depth on Tulane Avenue. It will give the motor car company one of the finest dealer display room locations in New Orleans, Edmond H. Fairchild is president of the United Motor Car Company and Joseph H. Rule is vice-president.

FARGO. N. D.—The United States Tire Co., branch at 632 Second Avenue, proving too small, the company has leased 7000 square feet of space at 320 Northern Pacific Avenue, Manager C. W. Hulian reports. This gives an increase of 4000 square feet. The Stubes Top and Body Works will be a tenant of the second floor until it moves to the Nick Breyer garage building, under construction at Fourth Street and First Avenue, N.

GREENSBORO, N. C.—Coble and Starr, of Greensboro has become dealer here for Willys-Knight and Overland motor cars. taking over the franchise formerly held by T. and H. Motor Company, which now handles Studebaker.

CARTHAGE, Mo.—C. B. Nance has purchased the Durant and Star dealership in Carthage and leased the Hannum garage building, 124 Grant Street, where he will operate. In addition to a sales division the company will conduct a full equipped service garage and handle parts and accessories. The business will be conducted under the name of the Nance Motor Co.

DENVER, Colo.—Chas. E. Hilliker, formerly of the Martin-Hilliker Mortuary, and later connected with the Olinger Mortuary of this city, has purchased the interest of George Irvin in the Stovall-Irvin Ford agency located at Broadway and Alameda, and the firm will be known henceforth as Stovall-Hilliker. Mr. Irvin has bought the interest of J. O. Stannage in the Stannage-Vorbeck Company, also Ford retailers, this firm becoming Stannage-Irvin. They are located at Broadway and Arapahoe. Mr. Stannage is retiring.

CHATHAM, Ont.—Colonial Traders Limited, this city, have been appointed by the Russell Manufacturing Company of Middletown, Conn., as resident factors for

"Russo" products throughout the Dominion of Canada and Newfoundland. Colonial Traders recently established a Western branch at Vancouver, B. C.

LOS ANGELES.—The Electric Equipment Corporation of Los Angeles has taken on Southern California distribution of Stromberg shock absorbers.

GALESBURG, Ill.—The new two-story garage on East Simmons Street built for A. L. Mulvaney is open for business. Mr. Mulvaney occupies the second floor with a general repair shop and Packard service for the Flannagan Motor Car Company, Packard dealers, whose sales rooms are on the ground floor.

DULUTH, Minn.—J. A. Kohn, proprietor of the Duluth Auto Exchange, Duluth, Minn., has bought from J. E. Davis the Zenith Motor Co., local agency for the Hudson-Essex. Mr. Kohn is associated with Jacob Jacobson and Harold Crassweiler of Jacobson Bros., contractors. The company has just moved from 316 E. Superior Street to a new 3-story building at 222 E. Superior Street.

LOS ANGELES.—F. L. Carley, for eight years with General Motors in Detroit, has been appointed service manager of the downtown headquarters of Stanley W. Smith, Inc., Los Angeles Hudson-Essex dealers.

BIRMINGHAM, Ala.—The Jordan Motor Co., of Birmingham, Ala., Oldsmobile distributors, announces the company's recent removal to larger quarters at 215 Twenty-first Street. The company also handles the Hudson and Essex line in the Bessemer, Ala., territory, where it operates a branch.

AKRON, O.—The Ge-Na Tire Sales Co., has been chartered with an authorized capital of 200 shares, no par value designated to sell tires, tubes and accessories. Incorporators are W. T. Nagle, F. L. Gehres, Lawrence Halter, C. T. Yeager and Dwight G. Hay.

MILWAUKEE, Wis.—Roman Gabryszek of Milwaukee has been appointed Hudson-Essex dealer in Bay View, a suburb, and has leased the building at 141 Ward Street formerly occupied by the Bay View Nash Co. He was formerly with the Edwards Motor Car Co., distributors for Dodge Brothers cars and Graham trucks.

CLEVELAND, O.—The Carrig & Collins Oil Co., has been incorporated with a \$10,000 capital to deal in oils, greases, gasoline and automobile accessories. Incorporators are M. P. Carrig, C. J. Collins, W. G. Gibbons, John E. Gallagher and Emmett P. Dowling.

CHARLOTTE, N. C.—L. G. Rogers, formerly manager of the Southern Radio Corporation, of Charlotte, N. C., has assumed his duties as southern representative of the Radio Corporation of America, with headquarters at Charlotte.

CHICAGO.—The seventh branch establishment in Chicago of the Studebaker Sales Company is to be constructed at Lawrence and Avers Avenues, Albany Park, it is announced by H. R. Levy, president of the company.

TOLEDO, O.—The Francis-Raitz Auto Sales Co., 3412-16 Monroe Street, has been chartered with an authorized capital of \$5000 to deal in automobiles and accessories. Incorporators are Horace E. Francis, E. P. Raitz, G. E. Raitz, Edward Sowden and R. P. Whitehead.

MINNEAPOLIS, Minn.—Two new Nash dealers in the city are the Halleen Garage, 3008 West Fiftieth Street and Miller Motor Co., 1909 Chicago Avenue. The appointments were made by S. G. Gunderson, assistant manager Northwest Nash Motors, 1008 Nicollet Avenue.

LOS ANGELES.—George Gardiner, for many years general manager of the Master Service Company, and president of the Los Angeles Automobile Trade Association, recently established a replacement parts distributing store in the commercial district of the city.

#### With the Associations

#### **Exhibit Is Big Success**

ABILENE, Texas, Oct. 3.—The fall show of the Abilene Automotive Trades Association, held in connection with the West Texas Fair, was the most successful the automobile dealers of West Texas ever staged. The accessory dealers of Abilene joined with the automobile men to make the show more complete. So did the tire dealers. Seventeen automobile dealers and several accessory and tire dealers had exhibits.

The fall show this year was held in the building erected by the automobile men especially for show purposes. This building was completed at a cost of \$25,000.

Dealers report trade greatly stimulated through the show which was attended by some 50,000 persons.

#### Peoria Season Opens

PEORIA, Ill., Oct. 3. — At the first meeting of the fall of the Peoria Automobile Trade Association, President E. R. Maleham, presided. Rollen Travis gave the principal address, noting some of the pitfalls of the automotive industry and issuing a note of warning. It was voted to co-operate in a state membership campaign and committees will call upon every dealer within a radius of 50 miles and endeavor to procure his membership in the state association. Similar campaigns are to be carried in other districts in the hope of swelling the membership by several hundred.

#### Show Cars at Fair

MEMPHIS, Tenn., Oct. 3.—Favorable conditions attended the seventh annual show of the Memphis Automobile Dealers' Association which was held as a special feature of the Tri State Fair, just closed. The committee in charge of the motor vehicle display was composed of Harter B. Hull, Hugh H. Jetton, and Thomas H. Smart.

R. R. Price is president of the association.

In addition to exhibits of passenger cars, trucks, tractors and accessories were shown.

#### 75,000 See New Models

TYLER, Texas, Oct. 3.—A successful automobile show was held in East Texas at Tyler, by the Tyler Automobile Dealers Association in connection with the East Texas Fair. The show lasted for one week during which more than 75,000 persons viewed the new models. Twelve dealers participated in the show. Dealers from ten surrounding counties were here. Business has improved as a result of the show, dealers declare.

# LeQuatte Managing Iowa Association



T. W. LeQuatte

DES MOINES, Ia., Oct. 3.—At a meeting of the directors of the Iowa Automotive Merchants Association, T. W. LeQuatte, formerly of Des Moines but recently of Chicago, was elected secretarymanager of the association. For the past two years Mr. LeQuatte has been vicepresident and director of sales for the Potts-Turnball Advertising Agency of Chicago. Prior to his connection in Chicago, Mr. LeQuatte was for 14 years advertising manager of Successful Farming, a Meredith publication at Des Moines.

Mr. LeQuatte is well known as an advertising man, having served as vice-president and treasurer of the Associated Advertising Clubs of the World, director and secretary of the Agricultural Publishers Association, president of the Associated Advertising Clubs of Iowa, president of the Advertising Club of Des Moines and vice-president of the Advertising Club of Chicago.

#### SHOW COMMITTEE NAMED

TOLEDO, Oct. 3.—Charles E. Doan, head of the Doan Motors Co., distributors of Nash cars in the Toledo territory, has been named chairman of the committee in charge of the Toledo Automobile Show to be held in February.

Other members of the committee selected by the Toledo Automotive Trades association are George W. Close, Jr., Thomas J. Cooper, secretary, John W. Banting, treasurer, and Warren E. Griffith, Paul H. Jones, Eli E. Culver, and Robert Butler.

Fire which destroyed the old Terminal Auditorium has made it necessary to secure a new show place. Lucas County Armory and one of the new downtown garages are being considered as possible show sites.

#### Names Sales Congress Committee

DENVER, Colo., Oct. 5.—At a meeting of the Denver Automobile Dealers' Association the following committee was appointed to handle the Sales Congress to be held in this city Dec. 9 under the auspices of the National Automobile Dealers' Association and the National Automobile Chamber of Commerce: Chairman, Tom Botterill, distributor for Hudson-Essex; W. J. Hoy, Buick branch manager, and Paul Jarrue, Chevrolet branch manager.

The meeting will probably be held in the ball room of the Brown Palace Hotel, and all dealers of lines represented in the association from Colorado, Wyoming, part of New Mexico, and Nebraska will be invited to attend as guests of their distributors. Four or five speakers of national prominence will appear on the program.

#### Urge Excise Tax Repeal

FAYETTEVILLE, N. C., Oct. 3.—Approximately 50 members of the North Carolina Automotive Trade Association attended the Fall meeting here of the association's third district, with Harry Clendenin, of Greensboro, the association's president, holding the gavel. A resolution urging repeal of excise taxes on automobiles was unanimously adopted.

#### Denver Show Planned

DENVER, Oct. 3. — Secretary Tom Braden of the Denver Automobile Dealers' Association has announced the choosing of Feb. 2, 3, 4, 5 and 6, 1926, as the dates for the annual Denver automobile show. This is held in the municipal auditorium each year, and is the principal event of its kind in the state.

#### Cottrell Is Advanced

SAN FRANCISCO, Oct. 3.— C. C. Cottrell, former manager of the good roads bureau of the California State Automobile Association, has been appointed consulting highway engineer of that organization, according to announcement by H. J. Burnnier, chairman of the association's good roads committee.

#### Organize at Durham, N. C.

DURHAM, N. C., Oct. 5.—The Durham Automotive Trade Association, recently organized, elected S. P. Alexander president and A. M. Worth, secretary-treasurer. Harry Clendenin, of Greensboro, president of the state association, attended the organization meeting.

## Southeast Business Outlook Is Promising Despite Drouth

#### Collections Reported Slowing Up— Full Effect of Economic Disturbance Expected Next Year

CHARLOTTE, N. C., Oct. 3.—The immediate outlook for the automotive trade in the Southeastern states is promising, with many dealers and distributors reporting accumulations of unfilled orders, but important financing companies report a marked slowing up of collections.

The steadily increasing tightness of money is attributed in part to seasonal agricultural conditions and in part to industrial conditions resulting from a general partial suspension of hundreds of industrial plants because of lack of hydro-electric power incident to the unprecedented drought. The unfavorable aspects of the agricultural situation are expected to become more definite and the managers here of the divisional offices of finance companies indicated their expectation that an increasingly unfavorable affect on the automotive trade will be noted.

The larger dealers and distributors in this territory appear to expect their respective volumes of business in the next twelve months hardly will equal that of the previous like period. Many dealers reported they would be unable to make immediate deliveries on orders before October 15, when the heavy accumulation of orders, unloosed after the recent wave of price-cutting, will have been wiped out.

Some recent improvement was reported in the demand for accessories and gararge supplies. The approaching close of the vacation season has resulted in a slackening of the demand for tires, though the tire business continues fair. The radio business continues, poor but is expected to show an early improvement. Only a fair demand was reported for Ford replacement parts.

The Ford Motor Company's assembly plant here reported receipt of orders for 10,200 touring cars within a week after the new models were announced. The plant had attained production only on touring cars by the middle of September.

#### Make Plans for a Greater Show at Jackson Mississippi

JACKSON, Miss., Oct. 5.—Work is in progress at the State Fair grounds here to provide for the enlarged automotive show, which it is claimed will be the most comprehensive ever shown in Mississippi at any fair, and equal to any show of its kind in the south. The automotive show will be held October 19-24 as a regular department of the State Fair. One of the largest structures, adjacent to the live stock section, is being fitted up for the purpose of housing the automotive show, which is under the personal direction of Dr. R. S. Curry.

#### Coming Motor Events

#### Automobile Shows

Danbury, (	Conn			Oct.	5-1
Eighth	annual	fair.	Danbury	Fair	
			r direction		
			Society,		
senger	cars, tru	icks, ti	actors, a	cces-	
sories.	etc., H.	Lage	manage	T.	

Boston			Oct. 10-17
World's	Rubber	and	Tropical
	on, Mechar		all, Chest-

ChicagoOct.	10-17
Seventh annual Used Automobi	le
Show under auspices of Chicag	go
Automobile Trade Association,	at

Dallas, Tex.		
Annual Automobile Show,	Sta	te
Fair Automobile Building, the auspices of the Dallas	und	er
motive Trade Association.	J. T	v.

connect, manager.	
BostonOct. 1	2-17
Annual radio show in Mechanics'	
Building. Shelton Fairbanks, man-	

-0						
Jackson,						
Auto	omobile	Show	by	local	trad	e
in co	nnectio	n with	State	Fair	. Di	
R. S	. Curry,	mana	ger.			

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Chicago	Nov.	5-7
Annual show in connection	with	
convention of National Stan	dard	
Parts Association, Coliseum.		

ChicagoNov. 9-14
Seventh annual exhibit of the Au-
tomotive Equipment Association
at Coliseum, in connection with
annual convention

New York	 Nov.	15-2
Twenty-first Salon.		

New York	J	an.	9-1
National Automobile Grand Central Palace	Show	in	

Newark,	N.	J	*************	*****	J	an.	16-2
Nine	teer	nth	annual	A	utom	obil	e
Show	7 ui	nder	auspice	s of	New	Jer	-
sey	Au	tom	obile E	xhib	ition	Co	

# Chicago Jan. 30-Feb. Twenty-sixth Annual National Automobile Show and Eleventh Annual Automobile Salon.

I	ouisville, KyFeb. 15-2
	Louisville Automobile Show, Ar-
	mory, under the auspices of the
	Louisville Automobile Dealers As-
	sociation, J. Garland Lea, man-
	ager.

#### Races

3
17
24
11
26

#### Conventions

Buenos	Aires,	ArgentineOc	t. 3-13
P	an-Ame	rican Road Congress	ı.

Montreal.	Que			Oct. 7-18
Fall	convention	of the	Motor	and
Acces	sory Manuf	acture	rs Asso	cia-

#### Pittsburgh, Pa.....Oct. 12-14 Pennsylvania Automotive Association Convention.

Montreal	Oct. 13-14
	of the National Asso-
ciation of	Automobile Insurance

Des	Moines, Ia		Nov.	12-13
	Automotive	Merchants'	Associa	3-
	tion Common	tion		

St.	Louis			Nov.	17-19
	Annual	Convention	of	Nations	al
	Time De	lors' Associa	atton		

New	York.			Jan	. 11-12
	Second		Motor		
	under	auspices	of Natio	nal Aut	to-
	mobile	Chambe	r of Con	amerce.	

#### Foreign Shows

Buenos A	Aires,	Arge	entina	Oct.	3-11
				Congress.	

London,	Eng	land		Oct.	8-17
Olare	nnie	Doggongo	Can	Chow	

#### RECEIVER FOR EARL MOTORS

JACKSON, Mich., Oct. 3.—Frank H. Shaw has been appointed receiver for Earl Motors Company of Jackson, by Circuit Judge Williams, in a decree filed by the Jackson City Bank against the company. All property of the company was ordered turned over to the receiver to be sold for the satisfaction of creditors of the concern. Appraisers have been appointed to value the plant and property. The decree sets forth that the concern owes various banks a total of \$604,973.

#### GOES TO FLINT

OAKLAND, Cal., Oct. 5. — George R. Scott, assistant general manager of the Durant Motor Company of California, with headquarters in Oakland, since the Pacific coast Durant factory came under the management of Norman de Vaux, has been appointed assistant general manager in charge of production at the Flint Motor Company's Plant, Flint, Mich.

#### Toledo Prepares to Receive Fleet of Twenty Airplanes

TOLEDO, Oct. 2.—Arrangements are being made for the Glidden tour of a fleet of about 20 aeroplanes to stop in Toledo, through Robert A. Stranahan, president of the Champion Spark Plug Co., leading Toledoan interested in promotion of commercial aviation in this part of the country.

The flyers will probably stop here at Heatherdowns, a large new subdivision in which suitable acreage for landing is available.

A committee headed by Stranahan is purchasing an airport for Toledo and some of the Ford aviation engineers have been in Toledo to survey various sites selected by the committee.

Stranahan proposes to purchase the field and develop it and later turn it over to the city when legal steps can be taken by the city to purchase such an airport.

Berlin, Germany......Nov. 26-Dec. 6
Annual Automobile Show in the
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# Louisville Begins to Feel

#### Used Car Stocks Lower Than Usual and Fall Is Expected to Be Best Season

LOUISVILLE, Oct. 1.—The effect of price reductions and new models which, when first announced, failed to materially increase new car sales, is beginning to be felt generally. September sales are ahead of August and are expected to equal July. Good general rains have broken the extended drouth which caused distributors some anxiety over the rural situation and fall sales throughout the state are expected to show quite an improvement over the summer months.

Used car stocks are lower than at any time during the past 12 months. Dealers continue to buy used cars carefully and are making strenuous efforts to keep stocks low. Low resale prices are enabling dealers to move used cars rapidly.

Ford sales are showing a decided improvement over August, which had the lowest Ford sales record of any month this year, and the dealers are enthusiastic over the bright outlook for sales of the new models. Many of the new model open cars have been sold and delivered and practically every dealer has a stack of orders for the new closed Fords and will begin delivering these models early in October.

Time payments are satisfactory and very few repossessions are being reported. General business conditions are good. Collections are improving. Truck sales are equaling last year's record but are not keeping pace with passenger car sales. Tire, accessory and replacement parts dealers report sales as fair while radio jobbers and dealers report a slight improvement and are optimistic over fall and winter prospects.





Wife-"Dear, the doctor found two spoons and six buttons in baby's stomach."

Hubby (tuning radio) - "Wonderful what a small receiving set can pick up."

-College Comics.

The two great drawbacks to the happiness of the motor tourist are the billboard and the board bill.

-The New Yorker.

#### Good Excuse

She: Now, what are you stopping for? He (as the car comes to a halt): I have lost my bearings.

She: Well, at least you are original. Most fellows say they run out of gas.

The Wall Street Journal thinks motorists, in the interests of pedestrians, should carry their spare balloon tires on the front bumper.

-The Road.

One headlight is all you need if the other fellow's guess about the side it's

-Associated Editors (Chicago).

#### Take It or Leave It

Painted on the windshield of a used Ford roadster parked in front of The Road office was the expressive sign:

"For Sail. Cheep."

Of course the passing proof reader, who had been to spelling school, paused to smile over the sign and get funny at the expense of the rustic-looking owner.

"How soon does this boat sail?" he asked.

"Just as soon as some sucker comes along that can raise the wind," was the rustic's ready reply.

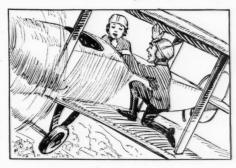
-The Road.

#### Impossible

"Have you heard the latest? Mrs. Fisher walks in her sleep!"

"How perfectly absurd . . . when they have three cars!"

-The Passing Show.



Mildred-What did you do when he proposed to you on that aeroplane trip?

Frances-Oh, I fell for it.

-Exchange.

#### CALIFORNIANS DEMANDING REBUILT USED CARS

(Continued from page 39)

crease in the number of men and women who, in buying their first automobile, purchase a rebuilt used car. These prospects buy rebuilt cars of standard makes which sell when new up to \$1,500. These cars can be bought for \$250 to \$800 or \$900, and this rather unusual wave of buying, which set in along about the beginning of vacation time, in May and June, has done some harm to sales of those cars priced, new, at up to \$1,000. On the other hand, these buyers have proved an excellent outlet for honestlyrebuilt cars in the hands of the new-car

Rumors of overstocking in used cars on the Pacific coast have gone out widely through the industry, but it is quite apparent to one on the ground that those dealers who reduced the prices they allowed for used cars to correspond with the factory price reductions on new cars have not suffered any on their trade-ins. Probably less than 3 per cent of the dealers in central and northern California failed to do this, and they are the only new-car dealers who have suffered. In spite of the efforts of a number of carowners who purchased automobiles this year prior to the recent price reductions to allow their cars to go by the board, and get new ones at the reduced figures, there have been comparatively few repossessions. In the opinion of the dealers of San Francisco and Oakland, these repossessions of new cars amount to less than 7 per cent of sales, and these mainly among cars priced at \$1,500 or less. In used cars, priced up to about \$750 or \$800, repossessions are estimated at 9 per cent, slightly higher than among the

#### Takes Capital to Stay

Dealers in used-cars only have been having rough going, and only those with capital, or the ability to get capital, have been able to hang on, and the greater

part of the used car business has gone back where it belongs, to the reputable and established dealers in new cars. The tendency to separate completely the newcar business from the used-car section is growing rapidly in the establishments of all the new car dealers. Some of these dealers are openly advocating the elimination of all "trade-ins," by the simple method of paying cash for all used-cars bought, and demanding cash first payment on all new cars sold. There has been a well-sponsored movement among San Francisco dealers for some time to enter into an agreement whereby each dealer would buy only used cars of the makes which he sells new, paying cash for them or taking them on new car sales, as he prefers. Both these plans have received very serious consideration by the leading dealers of San Francisco and Oakland, and indications are that the recent factory price-cuts and the resultant used-car complications may bring about definite action by the dealers' associations soon.

## Prices and Weights of Current Passenger Car Models

								8	-				
	SS. BODY STYLE.	PRICE	SHIP. WT. PA	SS. BODY STYLE.	PRICE	SHIP. WT. P.	ASS.	BODY STYLE.	PRICE	SHIF		BODY OTHER	
AJAX	100 in W 10		CHEVRO		111101	DUESE	ENBI	ERG	PRICE	8425	PASS 4-p	Brougham 4 d.	
2210 5-	108 in. W. Bp Touring	\$865		uperior" (Series 1	X)	3920	2-p	Straight "8" Roadster		3675	7-p	Sedan	. 1,495 1,695
	p Sedan	995	1875 5		\$525 525	3970	4-p	Roadster	Ţ		MOBI		
	SON "41"	** ***	2030 2- 2130 5-		675		4-p 4-p	Phaeton Phaeton	\$6,650	2595 2705	2-p 5-p	Roadster Touring	\$1,225 1,225
2650 5- 2675 4-		\$1,195 1,445	2130 5- 2215 5-		695 775	3980	4-p	Sp. Phaeton	Ŧ	2760 2875	2-p	Coupe	1,350
2925 2- 2875 5-	p Coupe	1,425	CHRYSL	ER "Four"			4-p 7-p	Sedan Sedan	†		5-p	Club Sedan	1,375
2925 5-	p Sp. Sedan	1,695 1,895	9900 5	(109 in. W. B.)						3050 3270	2-p 4-p	Roadster	1,795
2975 7-	"50" Touring	1,595	2300 5- 2405 2-	p Touring p Club Coupe	\$895 995	prices.	uiac	turers do not qu	uote list	3135	5-p	Roadster Touring	1,895 1,795
3200 7-		1,945	2510 5- 2570 5-	p Coach	1.045	DU PO		"D"		3295 3295	2-p 4-p	Coupe Coupe	2,095 2,095
APPERS			"Si	x" (1123/4 in. W. 1	1,095 B.)	3550	2-p 5-p	Roadster Touring	\$2,600 2,600	3410	5-p	Sedan	2,195
3100 5- 3130 5-		\$1,575 1,650	2805 4- 2785 5-	p Roadster	\$1,625 1,395	3800	7-p	Touring	2,750	JEW		"23-25"	
3145 4-	p Coupe	2,050	2895 5-	p Coach	1,445	DURAN	Б-р <b>УТ</b>	Touring Sedan	8,400	3025 3015	4-p 5-p	DeLuxe Road. DeLuxe Touring	\$1,500
3570 5- 3520 5-		2,100 2,050	2935 4- 2995 5-	p Brougham	1,795 1,865	2225	2-p	Sp. Roadster	900	3000 3150	5-p 5-p	Coach 2d. DeL. Coach 2d	1,245
8520 5-	"ST 8"	1,995	3060 5- 3085 5-	p Sedan	1,695		5-p 5-p	Touring Spec. Touring	810 930	3305	5-p	DeLuxe Sedan	
3750 4-	p Coupe	2,450	3090 5-	p Crown Sedan	1,995 2,095		4-p 4-p	Coupe Spec. Coupe	1,090	JORI		"J"	
8770 5- 8790 5-		2,450 2,595	3225 5-	(118¾ in. W. B.)  D Town Car	3,725	2505	5-p	Sedan	1,160 1,150	*******	4-p 5-p	Playboy Road. Sedan	\$1,695 1,845
AUBURN	_	2,000		AND "31"	0,120	ELCAR	5-p	Spec. Sedan	1,280			Series "A"	
	"6-66"		2325 5-		\$ 895	2560	5-p	"4-55" Touring	\$1,095	3330 3340	2-p 5-p	Playboy Road. Touring	
6-	p Sport-Roadster p Touring	1,495 1,395	2435 5-	p Touring DeLux p Coupe	e 1,025 975	2900	5-p 5-p	Coach Sedan	1,195	3450	3-p	Friendly "9"	2,275 2,575
2900 5-	p Brougham	1,595	2580 5-	p Sedan	895			"6-65"	1,395	3625 3520	5-p 4-p	Brougham Victoria	2,575
2885 5-	Wanderer	1,795 1,845	2750 5-	"43" Touring	1,095		5-p 5-p	Touring Coach	1,295 1,395	3525	5-p	Sedan	2,475 2,675
4-	"8-88"	1,975	2810 5-	Touring De Lu	xe 1,195		5-p	Sedan	1,595	XISS	7-p	Sedan "55"	2,925
6-1	p Touring	1,995	3000 5-	p Coach	1,195 1,295	4	4-p	"8-80" Roadster	2,315	3130	2-p	Speedster	\$1,795
5-j		2,250 2,350	3-		1,175	3700	5-p	Sp. Touring	2,165	*******	2-p 4-p	Sp'dster De Luy Speedster	ve 2,085
7-]	p Sedan .	2,550	3190 5-	p Sedan De Luxe		3000 8	7-p 3-p	Touring Coupe Roadster	2,265 r 2,315		4-p	Sp'dster De Lux	
BUICK	"Standard"	2,400	3190 5- COLE "N	p Sport Sedan IASTER"	1,625		5-р 7-р	Sedan Sedan	2,265 2,765	3530	2-p 4-p	Enc. Speedster Enc. Speedster	
2- <sub>1</sub>	Roadster	\$1,125	3675 4-1	Volante Touring	\$2,325	4000	5-p	Brougham	2,865		4-p	Enc. Spdstr. De	eL 2,685
5-] 2-]	p Touring Coupe	1,150	3795 7- 3675 4-	West. Touring	9 995	2185 E	5-р	Touring	*050	3190	2-p 4-p	Enc. Sp'd'r DeI Tourster	2,585 1,795
4-1	p Coupe	1,195 1,275	4055 5-	Brouette Sedan	8,225	2370 8	5-p	Coach	\$850 795	2980	4-p 5-p	Tourster DeL.	1,985
5- <u>1</u>		1,295 1,195	4000 7- 4100 7-	Royal Sedan	8.225	FLINT 3325	4-p	"55"	****	3170	5-p	Phaeton DeL.	1,585 1,785
	"Master"	1,100	CUNNIN	GHAM	0,020	3245 E	5-p	Sport Roadster Touring	1,595	*******	7-p 7-p	Touring De L	1,685
2-1		1,250	4600 7-	"V-6"			4-p 4-p	Sp. Touring Coupe	2,050 2,195	3430	4-p	Coupe	2,085
5-1 5-1	Touring Sedan	1,295 1,495	4500 4-		\$7,000 6,500	3595	5-p	Sedan	2,285	3540	4-p 5-p	Coupe De Luxe Brougham Seda	2,485
5-I	2d. Sedan	1,395	4700 4- 5000 6-	Coupe	8,000		5-p	Brougham 4 d.	2,485	*******	5-p	Broug. Sed. Del	L. 2,485
3-I	(128 in. W. B.) Sp. Roadster	1,495	DAGMAR		8,500		5-p 5-p	Touring	1,185	4070	5-p 7-p	Brougham 2 d. Sedan De Luxe	. 1,795 3,085
5-I	Sp. Touring	1,525	3750 4-1	Roadster	\$3,500		5-p	Sedan 4 d. Brougham	1,495 1,575	4010 3530	7-p 5-p	Berline Sed. Del Victoria	L. 3,185
4-1	Coupe	1,765 1,795	3800 4- 3700 4-	Sp. Tourer	3,500	FORD				******	5-p	Victoria De Lux	2,185 xe 2,485
5- <u>1</u>	p Brougham Sedan	n 1,925 1,995	4200 4-	Petite Coupe	3,500 4,500	1369 2	it st 2-p	arter and Dem. Runabout	Rims \$260		2-р	"75"	
CADILLA		1,000	4200 4-1 4500 4-1		4,500 4,750		5-p	With Balloon Ti	res 305	*******	2-p 2-p	Speedster Speedster De L.	2,195 2,485
	-63" Standard Line (132 in. W. B.)		4700 5- 4800 7-	Sedan	4,700		0-10	With Balloon Ti	290 res 335	*******	4-p 4-p	Speedster Speedster De L.	2,295 2,585
4075 2-1	p Coupe	\$3,045		"6-60"	4,750	With 1521 2	Sta 2-p	rter and Dem. R Runabout		******	2-p	Enc. Epeedster	2,485
4155 7-1		3,195 3,295	3100 4- 3200 4-		2,185 1,985			With Balloon Ti	845 res 370	*******	2-p 4-p	Enc. Sp'd'r DeL Tourster	2,985 2,195
4240 5-1	Brougham	2,995	3150 5-3 3400 3-3	Touring	1,785	1644 5	5-p	Touring With Balloon Ti	875	******	4-p	Enc. Speedster	2,585
4360 7-1 4-r		3,435 3,095	3500 5-		2,345 2,345	1749 2	2-p	Coupe	520	*******	4-p	Enc. Spdstr. De Tourster De L.	2,385
	Custom Built		DAVIS	"90"		1882 5	5-p	With Balloon Tin Sedan, Tudor	res 545 580	*******	5-p 5-p	Phaeton De Lux	1.985
******		3,250	2650 4-j 2915 4-j	M. o'War Road Legionaire Tou	\$1,495		5-p	With Balloon Ti	res 605	*******	7-p	Touring	2.085
	(138 in. W. B.)		2750 5-1	Phaeton	r. 1,495 1,395			Sedan, Fordor With Balloon Ti	660 res 685	*******	7-p 4-p	Touring De Lux Coupe	ce 2,285 2,485
3960	Phaeton	3,250 3,250	3070 5-1	Imperial Sedan	1,595	FRANK		"11-A"		******	4-p	Coupe De Luxe	2,885
4190 5-1	Coupe	4,000	3065 5-1		1,795		8-p 5-p	Sport Roadster Touring		*******	5-p 5-p	Brougham Seda Broug. Sed. DeL	n 2,395
4250 7-1	Suburban	4,150 4,285	2835 4-1	Roadster	1,795	2965 3	3-p	Coupe	2,635 2,700	*******	5-p 7-p	Brougham 2 d.	2,195
4355 7-1 CASE		4,485	3020 5-1 5-1		1,695	3080 5	5-p 5-p	Sedan Sport Sedan	3,090 3,225	********	7-p	Sedan De Luxe Berl. Sed. De L.	3,485 3,585
3260 3-p	J. I. C. Roadster	\$1,840	3245 5-1	Imperial Sedan		3275 7	7-p	Limousine	3,275	*******	7-p 7-p	Victoria Victoria De Lux	2,585
3290 5-r 3470 5-r	Touring	1,885	3215 5-1 DIANA "		2,095		5-p 5-p	Cabriolet Oxford Sedan	4,400 3,172	LEXI		N	e 2,000
3570 4-p	Sub. Coupe	2,160 2,480	2970 5-1	Roadster	\$1,895	GARDN	ER	6A	.,	2950	5-р	"Concord" Touring	
3640 5-p 3650 5-p		2,590 2,590	2990. 5-1 3245 5-1	Phaeton	1,895		-p	Brougham Touring	\$1,495	3000	5-p	Touring (Enc.)	
	"X"		3245 5-1	DeLuxe Sedan	1,995 2,195	4	l-p	Sport Roadster	1,395 1,595	2950 3200	5-p 5-p	Spec. Touring Sedan	1,795 2,185
8050 5-p	Touring	1,570 1,595	3130 5-1 3140 5-1		2,095 2,095	3280 5	-p -p	Cabriolet Sta. Sedan	1,845 1,595	3425	5-p	Spec. Sedan	2,185
380 5-p 380 5-p	Sub. Coupe	2,290	DODGE 1	BROTHERS	2,000	0000		DeLuxe Sedan	1,895	3120	2	linute Man"	0 * 4 *
3400 5-p	Sedan	2,290 2,385	2473 2-1 2593 2-1		\$ 855 r 955		i-p	8A Brougham	1,995	3195	2-p 5-p	Roadster Touring	2,145 2,095
950 7-p	"Y" Touring	2,225	2567 5-1	Touring	875	3350 5	-p	Touring Sport Roadster	1,995	3489 3230	7-p 5-p	Touring Lark Touring	2,195
1320 7-p	Sedan	2,975	2708 2-r	Spec. Touring Coupe "B"	975 960	3480 4	-p	Cabriolet	1,995 2,245	3368	5-p	Cal. Touring	2, <b>3</b> 45 2, <b>4</b> 95
CHANDLI B090 2-1	-		2823 2-p 2995 5-p	Spec. Coupe "B"	4 04= 1		-p	Sta. Sedan Sport Sedan	1,995 2,295	3395 3375	7-p 7-p	Cal. Touring Royal Coach	2,495 2,495
3132 4-p	Roadster	\$1,695 1,785	3077 5-p	Spec. "B" Sedan	1,045 n 1,145	3600 5	-p	DeLuxe Sedan	2,295	3440	5-p	Brougham	2,595
3085 5-p 3223 7-r		1,495	3020 5-p 3107 5-p	Sedan A	1,195 n 1,280	GRAY 1750 5	-p	"O" Touring		3542 LINC	5-p )LN	Sedan	2,895
3248 4-p	Royal Dispatch	1,595 1,885	2723 5-p	Coach	1,035	1880 3	-p	Coupe	\$595 825	4380	2-p	Roadster	\$4,000
3376 5-p 309 5-p		1,595 1,695	DORRIS	Spec. Coach	1,135		-p	Sedan Royal Sedan	845 975	4595 4565	7-p 4-p	Touring Phaeton	4,000
3525 5-p 128 5-p	Met. Sedan	1,795	4120 4-p	Pasadena Tour.	\$4,150	HERTZ		D-1	510	4655	*****	Sport Touring	4,500
5-	p 20th Cent'y Sed.		4115 7-p 4193 4-p	Touring	4,150	3360 5. HUDSON			\$1,695	4775	4-p 4-p	Coupe Sedan	4,600 4,800
594 7-p 585 7-p	Sedan	1,895 3,095	4200 5-p	Sedan	4,985 5,550	3425 7-	-p	"Super Six" Phaeton	\$1,250	4825 4865	5-р 7-р	Sedan Sedan	4,900 5,100
		0,000	4310 7-r	Sedan	5,800	3450 5-	-p	Coach	1,195	4945	7-p	Limousine	5,300

#### Prices and Weights of Current Passenger Car Models

SHIP.				1											
WT. I		BODY STYLE.	PRICE		PASS.	BODY STYLE.	PRICE		PASS.	BODY STYLE.	PRICE		PASS.	BODY STYLE.	
		LE "48"				LE (Cont'd)		RICK		CKER		STEV	ENS-I	URYEA (Cont'd	)
280 330	4-p 7-p	Sportif Tour Touring	\$7,460 7,460	2660 2535	5-p 5-p	De Luxe Coach Sedan	1,040		"Six"			4800 4800	7-p 7-p	Vestibule Lim.	10,175
630	5-p	Victoria Sedan	10,056	2735	5-p	De Luxe Sedar	1,025	********	5-p	Roadster Phaeton	\$1,595 1,495	4800	7-p	% Limousine Cabriolet	10,175
164 540	7-p 7-p	Brougham	10,046	OVE	RLAN	D "91" 4	-,	*******	3-p	Coupe Roadster	1,695	STUD	EBAK		,
368	7-p	Touring Lim. Enc. Drive Lim.	9,50b 10,05b		(1	100 in. W. B.)			3-p 4-p	De Luxe Coupe De Luxe	1,820			Standard Six	
600	7-p	Cabriolet	10,300	1919	5-p 2-p	Touring Coupe	\$495		5-p	Spec. Sedan	1,795	2760	3-p	Du. Roadster	\$1,125
	_	Jr8"		2205	5-p	Sedan De Lux	625 e 695		5-p 7-p	De Luxe	1,920	2820 2870	3-p 5-p	Sport Roadster Du. Phaeton	1,235
00	2-p 5-p	Roadster Touring	2,150	2202	5-p	Std. Sedan 2 d	. 595	********	5-p	Sedan De Luxe Coach Broughar		2950	5-p	Sport Phaeton	1,255
00	5-p	Sedan	1,785 2,285		(11	"93" 6 234 in. W. B.)			5-p	De Luxe	1,720	2945 2980	3-p	Country Club	1,295
50	5-p	Brougham	2,285	2443	5-p	Sta. Sedan	895		Eight"		B.)	3260	5-p 5-p	Sedan	1,195
cFA	RLAN	"6"		2584	5-p	Sedan DeLuxe	1,095		3-p	Roadster	1,995	3280	5-p	Berline	1,650
		"SV"		PACE	KARD	"6"		*******	5-p 3-p	Phaeton Coupe Roadster	1,995		_	Special Six	
00	2-p	Roadster	\$2,650	3643	4-p	126 in. W. B.) Roadster	\$2,785		3-p	De Luxe	2,220	3360 3480	3-p 4-p	Du. Roadster Sp. Roadster	1,395 1,595
	2-p	Spec. Roadster	2,900	3653	5-p	Touring	2,585	*******	5-p 5-p	Spec. Sedan De Luxe	2,195	3475	5-p	Du. Phaeton	1,445
00	5-p 7-p	Touring Touring	2,650 2,750	3595 3753	4-p 4-p	Sp. Touring Coupe	2,750		7-p	Sedan De Luxe	2,320 2,470	3675	4-p	Victoria	1,750
50	4-p	Coupe	3,180	3937	5-p	Sedan	2,585 2,585		5-p	Coach Broughan	n 1,995	3785 3545	5-p 5-p	Brougham Coach	1,695 1,445
60	5-p	Sedan	3,180	9700	(1	33 in. W. B.)		*******	5-р	De Luxe	2,120	3885	5-p	Sedan	1,895
0	5-p 7-p	Spec. Sedan Sedan	3,180 3,280	3793 4043	7-p 7-p	Touring Sedan	2,785 2,785	ROAL				3890	5-p	Berline	2,120
	5-p	Sub. Sedan	3,330	*******	5-p	Club Sedan	2,725	1		5" (115 in. W. 1			7-p	Big Six Du. Phaeton	1 705
••	7-p	Sub. Sedan	3,480	4143	7-p	Sedan Limousin	e 2,885	*******	2-p 5-p	Roadster Spec. Tourer	\$1,385	*******	5-p	Coupe	1,795 2,045
•••	5-p	Brougham 4 d.	3,180		(1	36 in. W. B.)		*******	2-p	Bus. Coupe	1,245 1,295	*******	5-p	Brougham 4 d.	2,195
10	0	"TV"		4060	4-D	Tunabout	3,950	*******	5-p	Coupe	1.395	*******	7-p 7-p	Sedan Berline	2,245
0	2-p 4-p	Roadster Sp. Touring	5,400 5,600	4090 4023	5-p 4-p	Touring	3,750	****	5-p -54-E"	Sedan DeLuxe		1	-		2,325
0	4-p	Coupe	6,720	4242	4-p 4-p	Sp. Touring Coupe	3,900 4,650			(118-138 in. W.		STUT 3492	Z 2-p	"6-94" Roadster	\$2,395
0	4-p	Tour. Sedan	6,720	4528	5-p	Sedan	4,750	********	4-p 4-p	Roadster Tourer	2,385 1,985	3640	5-p	Touring	2,395
0	7-p 6-p	Tour. Sedan Sedan	6,810 6,720	*******	2-p	Coupe 43 in. W. B.)	5,775	*******	4-p	Sport	2,285	3940	4-p	Coupe	3,050
	7-p	Sedan	6,810	4199	7-p	Touring	3,950		7-p	Tourer Cabrielet	2,285	3926	5-p	Sedan "6-95"	<b>3,</b> 050
	7-р 7-р	Spec. Sedan Enc. Sedan	6,810	4655	5-p	Club Sedan	4,890		3-p 4-75-F	Cabriolet " (128 in. W. B	2,750	4064	5-p	Sportster	3,035
	7-p	Sub. Sedan	7,110 7,110	4710	7-p 7-p	Sedan Sedan Limousin	5,000		4-13-1	Custom Built"	•)	4152	7-p	Tourster	3,070
0	7-p	Town Car	9,000	PAIG		"21-24"	0,100		2-p	Speedster	3,485	4305 4622	5-p 7-p	Sportbrohm. Suburban	3,785
RM	ION	"74"		3875	4-p	Phaeton	\$2,165		3-p	Sport	3,285	4675	7-p	Berline	3,935 4,035
5	2-p		\$3,295	3935	7-p	Phaeton	2,165	*******	4-p "8-88"	Tourer	2,985	VELI	-	"60"	2,500
4	5-p	Phaeton	3,295	4100 4325	5-p 7-p	Sedan De Luxe	2,395		-	(		3030	4-p	Sp. Roadster	\$1,650
4	7-p 5-p	Touring Brougham Coupe	3,295		_	Sedan De Luxe	2,840	*******	4-p 5-p	Roadster Sport	2,750 2,750	2840	5-p	Touring	1,275
•••	4-p	Victoria Coupe	3,295	PEER	RLESS			********	5-p	Tourer	2,395	3025	5-p 2-p	Club Phaeton Coupe	1,450
-	2-p	Std. Coupe	3,295	3175	5-p	26 in. W. B.) Touring	#1 00F	*******	7-p	Tourer Speedster	2,585	3150	4-p	Coupe	1,825
9	5-р 5-р	Sedan Sedan De Luxe	3,295 3,775	3425	5-p	Coupe	\$1,895 2,295	*******	2-p 3-p	Cabriolet	2,985 2,950	3340 3083	5-p	Royal Sedan	1,825
9	7-p	Sedan	8,370	3500	5-p	Sedan	2,395	*******	5-p	Spec. Sedan	3,285	3005	5-p 5-p	Coach 2 d. Coach 4 d.	1,425
9	7-p 5-p	Sedan De Luxe Sedan Limousine		3275	(1	33 in. W. B.)		*******	7-p	Sedan (136-in. W. B.)	3,185	*******	5-p	Brougham	1,495
9	7-p	Sedan Limousine		3300	2-p 7-p	Roadster Touring	2,195 1,995	*******	5-p	Brougham	2,785		COTT	"44"	
RC		"6"		3700	7-p	Sedan	2,595	ROLL	S-ROY			3150 3300	5-p 4-p	Spec. Touring Brougham 3 d.	
0	3-p	_	\$4,500	3825	7-p	Limousine	2,695		2.02	Chassis	††			"60"	2,320
0	6-p	Touring	4,500	3950	4-p	"8-67" Phaeton	2,845					3300	5-p	Sedan	2,325
0	4-p 4-p	Sporting Coupe	4,500 6,250	3995	7-p	Phaeton	2,895	prices	anufac	cturers do not qu	ote list	WILL	S SAI	NTE CLAIRE "B-68"	
0	5-p	Sport Sedan	6,250	4300 4310	5-p	Town Broughan				440.000			(12	27 in. W. B.)	
0	4-p	Tour. Limousine	6,500	4400	5-p 7-p	Town Sedan Sub. Sedan	3,495 3,595	STAN 3400		"252"		3265	4-p	Roadster	\$2,985
0	4-p	Brougham	6,500	4525	7-p	Berline Lim.	3,795	3800	5-p	Phaeton Sedan	\$2,500 3,300	3335 3500	5-p 7-p	Traveler Phaeton	3,085
ON	ī	Series "A"		4100 4150	4-p	Victoria Coupe		STAR		bedan	3,300	3495	4-p	Coupe	2,885 3,785
0	5-p		\$1,895		5-p	Sub. Coupe	3,295	SIAK	2-p	Roadster	****	3520	5-p	Sedan	3,885
5	3-p 5-p	Cab. Roadster Touring	1,595 1,195	PIER	CE-AR			*******	2-p 5-p	Roadster Touring	\$525 525	3635 3570	7-p 5-p	Sedan Brougham 4 d.	3,900 3,900
0	5-p	Coach	1,395	4950	0 -	"33" Danahara		*******	2-p	Coupster	595	3710	7-p	Limousine	4,085
0	5-p	DeL. Sedan 2 d	1,495	4350 4500	2-p 4-p	Runabout Touring	\$5,250 5,250		2-p	Coupe Coach	675	*******	7-p	Town Car	5,500
)	5-p 5-p	DeLuxe Sedan 4 d.	1,545 1 1,695	4590	7-p	Touring	5,250	*******	5-p 5-p	Sedan 4 d.	695 775	"C-68"		om Built 127 in.	-
		London		4730 4800	3-p	Coupe	6,800		-	NIGHT		3265	4-p	Roadster	3,185
0	5-p	Sp. Touring	1,985	4960	4-p 7-p	Sedan Sedan	6,900 7,000	LILA		"B" (4)		3520 3635	5-p 7-p	Sedan Sedan	4,085
	3-р 7-р	Touring	1,985	4750	4-p	Coupe Sedan	6,900		4-p	Coupe Roadster	\$1,795	3570	5-p	Brougham	4,100
0	5-p	Petite Sedan	2,540	4730 4850	6-p	Brougham Limousine	6,800	3775	5-p	Touring	1,595	3710	7-р	Limousine	4,285
SH		"Special"		5060	7-p 7-p	Enclosed Lim.	7,000 7,000	4250 3750	5-p 4-p	Sedan Coupe Brougham	2,095	8455	"W-6"	(	
)	2-p	Roadster	\$1,135	4780	7-p	French Lim.	7,000		5-p	Brougham	2,095	3410 3550	4-p 5-p	Roadster Gray Goose Trav	2,485
0	5-p	Touring	1,135	4730	6-p	Landaulet	7,000			"S" (6)	-,	3500	7-p	Touring	2,485 2,385
	5-p	Sedan 2d Sedan 4d	1,265 1,545	3205	2-p	"80" Roadster	9 90 5		2-p	Roadster	2,495	3630	4-p	Coupe	2,985
	5-p		-,010	3260	4-p	Phaeton	2,895 3,095	3775	5-p	Touring	2,395	3630 3680	5-p 5-p	Brougham Sedan	3,185 3,185
	5-p	'Advanced'		3385	7-p	Phaeton	2,895	3850 4025	7-p 2-p	Touring Coupe	2,495 3,395	3775	7-p	Sedan	3,285
		'Advanced" 21 in. W. B.)		3430	5-p 4-p	Coach Coupe Laudau	3,150 3,820	4275	4-p	Sp. Coupe	3,150	3835	7-p	Limousine	3,385
0		Advanced" 21 in. W. B.) Roadster	1,375	3365	4-p	Coupe	3,695	3950	5-p	Sedan	2,945			W-6 Vogue"	
0	3-p 5-p	21 in. W. B.) Roadster Touring	1,375	3335				4275	7-p 4-p	Sp. Brougham	3,395	3455	(12	7 in. W. B.)	
0	(12 3-p 5-p 5-p	21 in. W. B.) Roadster Touring Sedan 2 d		3335 3440	5-p	Sedan	3,895	*******					4-70	Roadston	@0 78F
0	3-p 5-p 5-p	21 in. W. B.) Roadster Touring Sedan 2 d 'Advanced''	1,375	3335	5-p 7-p 7-p	Sedan	3,995	*******		Sp. Sedan "C" (6)	3,395	3770	4-p 5-p	Roadster Brougham	\$2,735 3,400
0	3-p 5-p 5-p 5-p	Roadster Touring Sedan 2 d  'Advanced"  'in. W. B.)	1,375 1,485	3335 3440 3560 3615	5-p 7-p	Sedan Enc. Drive Lim.	3,995	3525	4-p	Sp. Sedan		3770 3765	5-p 5-p	Brougham Sedan	3,400
	3-p 5-p 5-p	Roadster Touring Sedan 2 d 'Advanced" Touring Touring Touring	1,375 1,485	3335 3440 3560	5-p 7-p 7-p	Sedan Enc. Drive Lim. "T-6"	3,995 4,045	3525 3540	4-p 5-p	Sp. Sedan "C" (6) Touring Touring	3,395 1,875 1,875	3770 3765 3905	5-p 5-p 7-p	Brougham Sedan Sedan	3,400 3,400 3,500
	(12 3-p 5-p 5-p (12 7-p 4-p 5-p	Roadster Touring Sedan 2 d 'Advanced" Touring Touring Touring Touring Victoria Coupe 4 d.	1,375 1,485 1,525 2,090 2,190	3335 3440 3560 3615 <b>REO</b> 3350 3182	5-p 7-p 7-p 2-p 5-p	Sedan Enc. Drive Lim. "T-6" Roadster Sp. Touring	3,995 4,045 \$1,665 1,595	3525 3540 3550	4-p 5-p 2-p	Sp. Sedan "C" (6) Touring Touring Sport Coupe	3,395 1,875 1,875 2,185	3770 3765 3905 3975	5-p 5-p 7-p 7-p	Brougham Sedan Sedan Limousine	3,400
	3-p 5-p 5-p (12 7-p 4-p 5-p 7-p	Roadster Touring Sedan 2 d Advanced" Tin. W. B.) Touring Victoria Coupe 4 d. Sedan	1,375 1,485 1,525 2,090	3335 3440 3560 3615 <b>REO</b> 3350 3182 3350	5-p 7-p 7-p 2-p 5-p 2-p	Sedan Enc. Drive Lim. "T-6" Roadster Sp. Touring Coupe	3,995 4,045 \$1,665 1,595 1,495	3525 3540 3550 3650 3700	4-p 5-p 2-p 5-p 5-p	Sp. Sedan "C" (6) Touring Touring Sport Coupe Coupe Broughan Sedan	3,395 1,875 1,875 2,185	3770 3765 3905 3975	5-p 5-p 7-p	Brougham Sedan Sedan Limousine IGHT	3,400 3,400 3,500
	(12 3-p 5-p 5-p (12 7-p 4-p 5-p 7-p AND	21 in. W. B.) Roadster Touring Sedan 2 d 'Advanced'' 7 in. W. B.) Touring Victoria Coupe 4 d. Sedan "6"	1,375 1,485 1,525 2,090 2,190 2,290	3335 3440 3560 3615 <b>REO</b> 3350 3182	5-p 7-p 7-p 2-p 5-p	Sedan Enc. Drive Lim. "T-6" Roadster Sp. Touring	\$1,665 1,595 1,495 1,565	3525 3540 3550 3650 3700 3700	4-p 5-p 2-p 5-p 5-p 5-p	Sp. Sedan "C" (6) Touring Touring Sport Coupe Coupe Brougham Sedan Brougham	3,395 1,875 1,875 2,185 2,285 2,475 2,475	3770 3765 3905 3975 WILL 2900	5-p 5-p 7-p 7-p YS-KN	Brougham Sedan Sedan Limousine IGHT "65" Touring	3,400 3,400 3,500 3,600 \$1,195
	(12 3-p 5-p 5-p (12 7-p 4-p 5-p 7-p AND 2-p	Roadster Touring Sedan 2 d 'Advanced" Touring Touring Touring Touring Victoria Coupe 4 d. Sedan "6" Roadster	1,375 1,485 1,525 2,090 2,190 2,290 \$975	3335 3440 3560 3615 <b>REO</b> 3350 3182 3350 3400 3545 <b>REVE</b>	5-p 7-p 7-p 2-p 5-p 2-p 5-p 5-p	Sedan Enc. Drive Lim.  "T-6" Roadster Sp. Touring Coupe Sedan 4 d. Spec. Sedan "25"	3,995 4,045 \$1,665 1,595 1,495	3525 3540 3550 3650 3700 3700	4-p 5-p 2-p 5-p 5-p 5-p 5-p	Sp. Sedan "C" (6) Touring Touring Sport Coupe Coupe Brougham Sedan Brougham Brough. Sedan	3,395 1,875 1,875 2,185 2,285 2,475	3770 3765 3905 3975 WILL 2900 2955	5-p 5-p 7-p 7-p YS-KN 5-p 3-p	Brougham Sedan Sedan Limousine IGHT "65" Touring Coupe	3,400 3,400 3,500 3,600 \$1,195 1,395
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(12 3-p 5-p 5-p (12 7-p 4-p 5-p 7-p AND 2-p 5-p 5-p	Roadster Touring Sedan 2 d 'Advanced" 7 in. W. B.) Touring Victoria Coupe 4 d. Sedan "6" Roadster Touring Coach	1,375 1,485 1,525 2,090 2,190 2,290	3335 3440 3560 3615 <b>REO</b> 3350 3182 3350 3400 3545 <b>REVE</b> 3900	5-p 7-p 7-p 2-p 5-p 5-p 5-p 5-p 5-p	Sedan Enc. Drive Lim. "T-6" Roadster Sp. Touring Coupe Sedan 4 d. Spec. Sedan "25" Sp. Roadster	\$,995 4,045 \$1,665 1,595 1,495 1,565 1,745 \$2,750	3525 3540 3550 3650 3700 3700 STEV	4-p 5-p 2-p 5-p 5-p 5-p 5-p 5-p	Sp. Sedan "C" (6) Touring Touring Sport Coupe Coupe Brougham Sedan Brougham Brough, Sedan	1,875 1,875 2,185 2,285 2,475 2,475 2,480	3770 3765 3905 3975 WILL 2900	5-p 5-p 7-p 7-p YS-KN 5-p 3-p 5-p	Brougham Sedan Sedan Limousine IGHT "65" Touring Coupe Sedan	3,400 3,400 3,500 3,600 \$1,195 1,395 1,450
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(12 3-p 5-p 5-p (12 7-p 4-p 5-p 7-p <b>AND</b> 2-p 5-p 5-p 5-p	Roadster Touring Sedan 2 d 'Advanced" Touring Touring Touring Victoria Coupe 4 d. Sedan "6" Roadster Touring Coach Landau Coupe	1,375 1,485 1,525 2,090 2,190 2,290 \$975 1,025 1,025 1,125	3335 3440 3560 3615 <b>REO</b> 3350 3182 3350 3400 3545 <b>REVE</b> 3900 3975	5-p 7-p 7-p 5-p 5-p 5-p 5-p 5-p 5-p 4-p	Sedan Enc. Drive Lim. "T-6" Roadster Sp. Touring Coupe Sedan 4 d. Spec. Sedan "25" Sp. Roadster Spedster	\$1,665 1,595 1,495 1,565 1,745 \$2,750 2,750	3525 3540 3550 3650 3700 3700  STEV 4200	4-p 5-p 2-p 5-p 5-p 5-p 5-p 5-p	Sp. Sedan "C" (6) Touring Touring Sport Coupe Coupe Brougham Sedan Brougham Brougham Brougham Brough Sedan URYEA Roadster	1,875 1,875 1,875 2,185 1 2,285 2,475 2,475 2,475 2,480	3770 3765 3905 3975 WILL 2900 2955 3090	5-p 5-p 7-p 7-p YS-KN 5-p 3-p	Brougham Sedan Sedan Sedan Limousine HGHT "65" Touring Coupe Sedan Coupe Sedan Brougham	3,400 3,400 3,500 3,600 \$1,195 1,395
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3-p 5-p 5-p 7-p 4-p 5-p 7-p <b>AND</b> 2-p 5-p 5-p 5-p 5-p	21 in. W. B.) Roadster Touring Sedan 2 d 'Advanced" 7 in. W. B.) Touring Victoria Coupe 4 d. Sedan "6" Roadster Touring Coach Landau Coupe Sedan	1,525 2,090 2,190 2,290 \$975 1,025 1,095 1,125 1,195	3335 3440 3560 3615 <b>REO</b> 3350 3182 3350 3400 3545 <b>REVE</b> 3900	5-p 7-p 7-p 2-p 5-p 5-p 5-p 5-p 5-p	Sedan Enc. Drive Lim. "T-6" Roadster Sp. Touring Coupe Sedan 4 d. Spec. Sedan "25" Sp. Roadster Speedster Touring Sedan	\$,995 4,045 \$1,665 1,595 1,495 1,565 1,745 \$2,750 2,750 2,750	3525 3540 3550 3650 3700 3700  STEV 4200 4400	4-p 5-p 2-p 5-p 5-p 5-p 5-p 5-p 5-p 7-p	Sp. Sedan "C" (6) Touring Touring Sport Coupe Coupe Broughan Sedan Brougham Brough, Sedan URYEA Roadster Touring	1,875 1,875 2,185 2,185 2,2475 2,475 2,475 2,480 \$8,150 7,500	3770 3765 3905 3975 WILL 2900 2955 3090 3062 3119	5-p 5-p 7-p 7-p 7-p YS-KN 5-p 5-p 5-p 5-p	Brougham Sedan Sedan Limousine HGHT "65" Touring Coupe Sedan Coupe Sedan Brougham "6"	\$1,195 1,395 1,595
00 00 00 00 00 00 00 00 00 KL	3-p 5-p 5-p (12 7-p 5-p 7-p 5-p 5-p 5-p 5-p 5-p 5-p 5-p	Roadster Touring Sedan 2 d 'Advanced" Touring Victoria Coupe 4 d. Sedan "6" Roadster Touring Couch Landau Coupe Landau Sedan Landau Sedan	1,375 1,485 1,525 2,090 2,190 2,290 \$975 1,025 1,025 1,125	3335 3440 3560 3615 <b>REO</b> 3350 3182 3350 3400 3545 <b>REVE</b> 3905 4050 4300	5-p 7-p 7-p 2-p 5-p 5-p 5-p 5-p 5-p 5-p 5-p	Sedan Enc. Drive Lim. "T-6" Roadster Sp. Touring Coupe Sedan 4 d. Spec. Sedan "25" Sp. Roadster Speedster Touring Sedan "M"	\$,995 4,045 \$1,665 1,595 1,495 1,565 1,745 \$2,750 2,750 2,750 3,800	3525 3540 3550 3650 3700 3700  STEV 4200 4400 4250 4600	4-p 5-p 2-p 5-p 5-p 5-p 5-p 5-p 4-p 4-p	Sp. Sedan "C" (6) Touring Touring Sport Coupe Coupe Brougham Sedan Brougham BroughAm BroughAm Brough. Sedan URYEA Roadster Touring Sp. Touring Coupe	1,875 1,875 1,875 2,185 2,285 2,475 2,475 2,475 2,480 \$8,150 7,750 9,000	3770 3765 3905 3975 WILL 2900 2955 3090 3062	5-p 5-p 7-p 7-p 7-p YS-KN 5-p 5-p 5-p 5-p 5-p	Brougham Sedan Sedan Limousine IGHT "65" Touring Coupe Sedan Coupe Sedan Brougham "6" Roadster	\$1,195 1,395 1,450 1,395 1,595 1,750
00 00 00 00 00 00 00 00 00 00 00 00 00	(12 3-p 5-p 5-p (12 7-p 4-p 5-p 5-p 5-p 5-p 5-p 5-p 5-p 5	21 in. W. B.) Roadster Touring Sedan 2 d 'Advanced" 7 in. W. B.) Touring Victoria Coupe 4 d. Sedan "6" Roadster Touring Coach Landau Coupe Sedan Landau Sedan E "30" Touring	1,375 1,485 1,525 2,090 2,190 2,290 \$975 1,025 1,025 1,125 1,125 1,125 1,295	3335 3440 3560 3615 <b>REO</b> 3350 3182 3350 3400 3545 <b>REVE</b> 3900 3975 4050	5-p 7-p 7-p 2-p 5-p 5-p 5-p 5-p 4-p 5-p 5-p	Sedan Enc. Drive Lim. "T-6" Roadster Sp. Touring Coupe Sedan 4 d. Spec. Sedan "25" Sp. Roadster Speedster Touring Sedan "M" Roadster	\$,995 4,045 \$1,665 1,595 1,495 1,565 1,745 \$2,750 2,750 2,750 3,800 \$3,200	3525 3540 3550 3650 3700 3700 3700 	4-p 5-p 2-p 5-p 5-p 5-p 5-p 5-p 4-p 4-p 4-p	Sp. Sedan "C" (6) Touring Touring Sport Coupe Coupe Brougham Sedan Brougham Brough, Sedan URYEA Roadster Touring Sp. Touring Coupe Sedan	3,395  1,875 1,875 2,185 2,185 2,475 2,475 2,475 2,480  \$8,150 7,500 7,750 7,750 10,000	3770 3765 3905 3975 WILL 2900 2955 3090 3062 3119 3323 3395 3582	5-p 5-p 7-p 7-p YS-KN 5-p 5-p 5-p 5-p 5-p 5-p	Brougham Sedan Sedan Sedan Limousine HGHT "65" Touring Coupe Sedan Coupe Sedan Brougham "6" Roadster Touring Coupe	3,400 3,400 3,500 3,600 \$1,195 1,395 1,450 1,395 1,595 1,750 2,095
	3-p 5-p 5-p (12 7-p 4-p 5-p 7-p <b>AND</b> 2-p 5-p 5-p 5-p 5-p 5-p	Roadster Touring Sedan 2 d 'Advanced" Touring Touring Touring Victoria Coupe 4 d. Sedan "6" Roadster Touring Coach Landau Coupe Sedan Landau Sedan E "30"	1,375 1,485 1,525 2,090 2,190 2,290 \$975 1,025 1,125 1,195 1,295	3335 3440 3560 3615 <b>REO</b> 3350 3490 3545 <b>REVE</b> 3900 3975 4050 4300	5-p 7-p 7-p 2-p 5-p 5-p 5-p 5-p 5-p 5-p 5-p	Sedan Enc. Drive Lim. "T-6" Roadster Sp. Touring Coupe Sedan 4 d. Spec. Sedan "25" Sp. Roadster Speedster Touring Sedan "M"	\$,995 4,045 \$1,665 1,595 1,495 1,565 1,745 \$2,750 2,750 2,750 3,800	3525 3540 3550 3650 3700 3700  STEV 4200 4400 4250 4600	4-p 5-p 2-p 5-p 5-p 5-p 5-p 5-p 4-p 4-p	Sp. Sedan "C" (6) Touring Touring Sport Coupe Coupe Brougham Sedan Brougham BroughAm BroughAm Brough. Sedan URYEA Roadster Touring Sp. Touring Coupe	3,395  1,875 1,875 2,185 1,2,285 2,475 2,475 2,480  \$8,150 7,500 7,750 9,000 10,000 9,675	3770 3765 3905 3975 WILL 2900 2955 3090 3062 3119 3323 3395	5-p 5-p 7-p 7-p YS-KN 5-p 3-p 5-p 5-p 5-p 5-p	Brougham Sedan Sedan Sedan Limousine HGHT "65" Touring Coupe Sedan Brougham "6" Roadster Touring	3,400 3,400 3,500 3,600 \$1,195 1,395 1,450 1,395 1,595

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# Current Passenger Car Models This list comprises cars distributed on a national basis Mechanical Specifications of

Lyc—I yccming
M&E—Merchant & Evans
Mar—Marvel
Mec—Mechanics Machine Thi—Thiemer
Tili—Thiloten
Tili—Tilloten
Uni—Uni—Uni—Wasul
Was—Wagner
Was—Wagner
Was—Wagner
Was—Wagner
Was—Wagner
Was—Wagner
Was—Wagner
Was—Wagner
Was—Wagner ABBREVIATIONS— NAMES OF MFRS. OF STOCK PARTS Sp—Splash (lubrication)

Sp—Spur gear (camshaft Tarre)

Sta—Special make

Sta—Standard

Th—Themosyphon

V—Cantilever

Var—Varies

X—Sleeve valve Pr-Ze. Pr-Al.. Pr-Ze. Chassis Lubrication— Type and Make Steering Gear-Make \*\*\*
ZEZENHHZZZZZ \*H ZŽEBZZZZZZZZZZ 4-Wheel Type =Optional PC—Pressure to all crankshaft and connecting rod bearings
PF—Full pressure to all bearings
PK—Pressure to crankshaft, conperings per precing rods and camshaft bearings
Pull Pump bearings
Pull pressure
Pull pressure
Pull print pressure
Pull pressure to an area print pressure to a print print pressure to a pressure pressure to a pressure pressure to a pressure pressure pressure to a pressure p BRAKES Hand—Type and Location Foot—Type and Location Gear Ratio REAR AXLE Type and Make Universals—Type and Make Gear Set-Make Roc. Clutch-Type and Make ELECTRICAL SYSTEM Ignilion System Make Air Cleaner? Carburetor Make ZZZZZ Thermostat? Cooling System ZZ ZZZZZ S STATE ALE STATE OF THE STATE Oil Cleaner? Oiling System No. Main Bear. TACCCCCCA TACCA TA Sep. Sep. Crankcase In-Camshall Drive 196 289 183 247 247 265 287 287 272 358 Valve Arrange-ment 200 196 196 261 145 196 268 177 177 199 207 276 Piston Dis-Rated H.P. Con. Spec. 4-3/8/44/2
Lyc. CF 4-3/8/65
Lyc. 28 (4-3/8/65)
Lyc. 28 (8-3/8/64)
Lyc. 28 (8-3/8/64)
Lyc. 28 (8-3/8/64)
Own. 66 (6-2/8/64)
Own. 11 4-3/8/44
Own. 11 4-3/8/44 Own. ..25F 4-35/8x41/2 Number of Cyls., Bore and Stroke Make and Model 30x5.25 30x5.25 32x6.20 32x6.20 30x5.77 32x6.27 30x5.77 31x5.25 31x5.25 30x3.440 3133.44 313.55 313.55 32.55 32.55 32.55 32.55 33.55 31x4†
33x6.00
31x5.25
33x6.00
32x6.20
30x6.20
33x6.20
33x6.20
33x6.20 Tire Size Decimals-Balloons Master V-6 132–142 V-6 132–142 6-60 118 6-70 115 90 115 5-80 125/2 3 St. 8 134–141 St. 8 134–141 109 116 116 110/2 110 120 100 119 117 1123-1183 KEY TO SYMBOLS 109 6-80 134-14 St. 8 134-14 126 -(Inches) Wheel Base Concord n. Minute Man 132-Super 6 Series R 23-25 Series A MAKE AND MODEL Dagmar
Dagmar
Dagmar
Dayis
Dayis
Dayis
Dayis
Dodge Brothers
Dooris
DuPont Chrysler Cleveland Cleveland Cole Cunningham

I.—L. head
m.—Metal
M.—Mechanical
N.—None (oil cleaner)
N.—None (oil cleaner)
O.—Optional (brakes)
O.—Special type (rear springs)
O.—Special type (rear springs)
O.—Oil cups
O.—Oil cups
O.—Single plate
P.—Single plate

G—Head and side
Gr—Grease cups
Gr—Grease cups
H—Horizontal (valves)
H—Hydraulic (brakes)
H—Integral
Inf—Integral
Inf—Integral
Inf—Integral
Inf—Integral
Inf—Integral
Inf—Integral
Inf—Integral
Inf—Integral
Inf—Integral
Inf

four wheels rear wheels transmission CI—Cast fron
Cu—Central magazine
Cu—Oil and grease cups
Cu—Aultiple disk
E-Ful elliptic
E-Ful elliptic
E-Ful External rear whee
E-F — External rear whee
E-T — External rear whee
E-T — External rear whee
F-Ful E-T — E-T

At extra cost
Balloons at extra cost
Semi-floating and A1—Aluminum
B—Semi-steel
B-F—Both internal acternal four wheels
Ch—Chain

(Continued on page 48)

(Continued on page 48)

# THE HUMAN SIDE &CADILLAC

To all present and prospective Cadillac owners:

Cadillac is great as an institution and as a product, not because of plants and equipment, not because of financial resources; but because to these is joined the kind of man-power which is peculiarly Cadillac.

It is probably true that in buildings and equipment, in fine mechanical facilities and their orderly arrangement—in every physical aspect—Cadillac is not equaled anywhere in the world.

But it requires nothing more than money to duplicate these things.

Important as they are to a product of Cadillac quality, an investment of millions comes to naught if the human element is lacking or fails in its part.

The men who build your Cadillac pour into their work more than skill and painstaking precision.

They pour into it their own loyalty to Cadillac and its high traditions; their deep-seated pride in the institution, in the product, and in the part they contribute; their unified will to make each individual Cadillac car worthy to be called the standard of the world.

That is the great driving force behind Cadillac; that is the animating spirit in Cadillac which cannot be duplicated by purchase; that is the living foundation on which Cadillac has grown to greatness.

The men who generate this driving force not only work for Cadillac, but with Cadillac.

They are literally a part of Cadillac, for every executive from high to low, and scores of men in the shops, are Cadillac stockholders. Many of them have grown to their prime, and beyond, in these factories.

They would not, even if they could, relax one iota of the alert vigilance and care they bring to their daily tasks; to them the Cadillac standards of precision and quality are above and beyond all others.

So think of your Cadillac, not as the impersonal product of impersonal machines, but rather as the spirited product of human hearts and hands which earnestly desire and strive to give you the finest motor car in the world.

J. P. Fisher
President

CADILLAC

Division of General Motors Corporatio



# Mechanical Specifications of Current Passenger Car Models—Continued from (This list comprises cars distributed on a national basis)

			October 8, 1925
	ABBREVIATIONS— NAMES OF MFRS. OF STOCK PARTS	A-K—Atwater Kent A-K—Atwater Kent Ada—Adams Ada—Adams Ana—Alemite Ana—Alemite Ana—Ansied R&B—Borg & Beck R&B—Borg & Beck BL—Bull & Ball Ball & Ball Con-Control Con-Control Con-Compbell Con-Compbell Con-Compbell Con-Compbell Del-Delon Del-Detroit Dil-Ditwelter Con-Compbell Del-Delon Del-Delon Del-Detroit Dil-Ditwelter Con-Compbell Del-Delon Con-Compbell Del-Delon Del-Delon Sel-Feters Del-Feters Sel-Feters Sel-Selisbury Sch-Selisbury Sch-Selisbury Sch-Selisburg Sch-Selisb	Tin—Tillotson Tin—Tillotson Tin—Tillotson Tin—Tillotson Wag—Wagner Wag—Wagner Wat—Wagner Wat—Watford Wat—Watford Wat—Watford Wat—Watford Wat—Watford Wat—Watford Ze—Zerk
u	Chassis Lubrication Type and Make	S S S S S S S S S S S S S S S S S S S	haf
	Rear Springs—Typ Length	of the two tentral to the tentral to	
	M—nssD garingS		ash (lar gear) pecial andard and ermo-sitiever aries re valv
BRAKES	Hand—Type and Location 4 Wheel Type (*=Optional)	E-R   M   Own   E-T   H   Own   E-T   Own   Own   E-T   Own   Ow	Sp—Splash (lubricati Sp—Spur gear (cams drive) Spe—Special make Sta—Standard TT—T head Th—Thermo-sphon V—Cantilever Var—Varies
	Gear Ratio Foot—Type and Location	# ## #################################	-
REAR AXLE	Type and Make	A CHARLES OF THE STATE OF THE S	PC—Pressure to all crankshaft and connecting rod bearings PF—Full pressure to all bearings PF—Pressure to crankshaft, connecting rods and camshaft bearings neeting rods and camshaft bearings PS—Splash with pressure Q—Quarine elliptic
put	Universals—Type s	m-Spi. m-Spi. m-Spi. m-Spi. m-Spi. m-Uni. f-Sne. m-Chi. m-Mec. m-Mec. m-Mec. m-Mec. m-Mec. m-Mec. m-Mec. m-Mec. m-Mec. m-Spi. m-Spi. m-Spi. m-Spi. m-Spi. m-Spi. m-Mec. m-Chi.	PC—Pressure to all cran connecting rod bearing PF—Full pressure to all PK—Pressure to crank necting rods and cam ings PS—Snlash with pressure Q—Quarter elliptic Q—Quarter elliptic
	Gear Set-Make	Own  Own  Own  W-G  W-G  Own  Own  Own  Own  Own  Own  Own  Ow	-Pressur Connectin -Full pr -Pressur -Pressur ings ings ings -Splash -Pump Quarter Rectifier
	Clutch—Type and	P. Spi D. Own	PC PF PK P
SYSTEM	Generator and Starter Make	DeJo.  DeJo.  DeJo.  Deloo  N-E.  Deloo  N-E.  A-L.  A-L.	ngs)
SYS	Ignition System	DeJo.  DeJo.  Wes  Wes  Splitting  Wes  Splitting  Beloo	L—L. head  m—Metal  M—Metal  M—Metanical  N—Onder oil cleaner)  O—Optional (brakes)  Ow—Oil cups with wick feed  P—Single plate  P—Frestrie gun
	Air Cleaner?	A ZZZZZZZ Z Z ZZZZKKK ZZZZ KZ ZZZKZZZZ Z Z	eane ear s akes (res with
	Thermostal? Carburetor Make	Str. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ad l anical (oil cl orm (re nal (br Il type cups cups
	Cooling System	A NNXXXXXXXXXX AA RAGAGAGAGA BAGAGAGA BAGAGA	Mechan Mechan None (c) Platfori Optiona Special Oil c
	Oil Cleaner?	E CALL CALLES OF THE CONTROL OF THE	
	Oiling System	M FF FF00000MO FOF FO COFFE COCCOMFCFF MCCOMM M M COFCOFF CO C	
	No. Main Bear.	5 pos sacadassossossop sad postera sadessossoperessossadada de de socadadessos per pre prepidententententententententententententente	els
7-1	Piston Material	A POOCOCE BE A POOCO TO THE POOCO TO THE POOCOCE BE A POC	G—Head and side G—Grease cups H—Herizontal (valves) H—Hydraulic (brakes) I—In head Int—Integral Int—Integral Int—Integral Int—Integral Int—Integral Int—Integral Int—Integral Int—Integral Internal rear, wheels
ENGINE	Crankcase In- teg. or Sep.	September 1	side ups (va (bra ear four rear
EN	Camabalt Drive	다. 다	and se cuontal gulic gral gral gral runal
	Valve Arrange-	N XHITCHILL I I FUXXXI: HTTTTTTTT OFFICE OF TOTTTTT I I	ead Grea Joriz Goriz Joriz Joriz Joriz Joriz Joriz Joriz
	Piston Dis- placement	20	
	Rated H.P.	್ಟ್ರಾಂಡ್ ನಿರ್ವಹಣ್ಣದ ಪ್ರಾಗತ್ತಿ ಅಭಿಯಾಗಿ ಅಭಿಯಾಗ ಕಾರ್ಯ ಕಾರ್ಯ ಕಾರ್ಯ ಕಾರ್ಯ ಕ್ಷಾಂಡ್ ಕ್ಷ್ಮಾನ್ ಕ್ಷ್ಮಾ	COPHELLE
	Number of Cyls., Bore and Stroke	8-2-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	CI—Cast fron Cm—Central magazine Cu—Oil and grease cups D—Multiple disk E—Fru elliptic E-F-External four wheels E-R—External rear wheels CF-R—External rear wheels CF-R—External rear wheels CF-R—First rear wheels CF-R—First rear wheels
	bas sala IsboM	Own Jr.	iron iron iron iron iron iron iron iliptic ternal four ternal tran
Tire Size Decimals-Balloons		30x5.77 32x6.20 33x6.20	-Cast in Centri-Oil an Centri-Oil an Indipole Exter Exter Exter R—Exter T—Exter Fabric Fabric
	Wheel Base (Inches)	124 136 1107 11137 11137 11137 11137 1121 1121 1121	1
	MAKE AND MODEL	Londor Control of the	KEY TO SYMBOLS  -At extra cost  -At extra cost  -Aballoons at extra co
MAKE		Locomobile Marmon Mefarlan Mefarlan Mefarlan Moon Moon Moon Nash Oakland Ookanabid Ookarad Ooverland Oover	KEY T  -At exit  -At exit exit exit exit exit exit exit exi

IF you really want to get the full truth about the Greater Beauty, Finer Performance and Unequalled Value of the latest Oldsmobile Sixjust talk to any owner you see driving the car!

If you want to know how it's selling -ask any of our dealers how many cars they are ordering above their allotments!

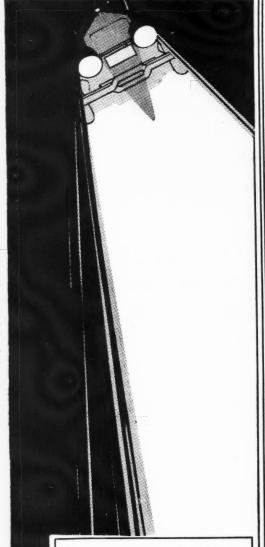
OLDS MOTOR WORKS, LANSING, MICHIGAN OLDS MOTOR WORKS OF CANADA, LIMITED, OSHAWA, ONTARIO



This illustration is from the Oldsmobile double-page two-color spread appearing in the Saturday Evening Post Oct. 17th.

OLDSMOBILESIX Greater Beauty

Finer Performance Lower Price



#### from every merchandising viewpoint flatlite is a perfect accessory—

FOINT
Every car owner needs the kind of light that flatlites give. This means the widest possible market that any accessory can enjoy.

Point The two ways in which flatlites are sold take care of every car owner's requirements. If his present headlamps are good—you sell him flatlite reflectors. If heneeds new headlamps—you sell him flatlite headlamps.

factites are legal everywhere and proved inservice. flatlite reflectors are in use everywhere. This proves car-owner acceptance yet leaves a big market still to be supplied.

fallites are easy to stock, easy to sell and easy to install. Three models of reflectors in two sizes supply all headlamps. Four models of flat-lite headlamps fit all cars. flatlite reflectors go in right over the old reflectors, plain glass (furnished) replacing patent lenses flatlites sell with one simple demonstration to practically every

flatlites sell with one simple demonstration to practically every prospect and a flatlite prospect is anybody who owns a car not already equipped to give the kind of light that flatlites give.

Foint flatlites have no known sales resistance. The low price of flatlites is usually a surprise to car owners, and this, balanced against what they bring in comfort, safety and freedom from legal difficulties, makes it quickly apparent that for sheer money's worth, flatlites have no equal in the accessory field.

# **Slatlite**



\$3.50 a pair up

Even the price of flatlite reflectors is all in favor of a sale.

If the prospect's headlamps are good you install flatlite reflectors right over his old reflectors, replacing his patent lenses with plain glass (furnished) at a cost to him ranging from \$3.50 up, according to make of car.



\$6.00 a pair up

flatlite headlamps are the equal in workmanship of any headlamp made and have the additional feature of flatlite service.

When the prospect wants the kind of light that flatlites give, and a simple demonstration takes care of that, it is easy to sell him flatlite headlamps, as the price is all in favor of the sale.

-flatlite is one accessory that has no sales resistance. It is needed everywhere — legal everywhere — priced right — easy to install.

flatlites bring daytime safety to nightime driving



REFLECTORS
forreplacement in any headlamp
HEADLAMPS

to fit all cars

Write us for particulars.

Department A

THE AMERICAN FLATLITE CO.
Reading Road at Dandridge Street
Cincinnati, Ohio



# $\mathcal{A} \mathcal{N}ew$

# General Motors Automobile

#### To the Automobile Dealers of America

THROUGH the Oakland Division, General Motors will shortly announce an entirely new

This newest member of a famous family will be the fruit of the resources, engineering skill and manufacturing experience gained by General Motors in more than seventeen years of leadership.

It will combine elements of appearance, performance, and engineering design which will win for it immediate public acceptance.

It will be built by Oakland and distributed in conjunction with the present Oakland Six.

This double franchise promises to become one of the most profitable in the industry.

Every automobile dealer in America—regardless of size, location or present affiliation—is invited to write at once for complete details. Address Oakland Motor Car Company, Pontiac, Mich.

THE HEAVY WEIGHT

IT <u>HOLDS</u> THE HEAVIEST LOADS



ianaly will be the standard and gasty and gastyll and manual standard Central Motors

livision, General e sii entirely new

Jakiand Six.

promises to become one



Display This Sign-

MEGILLE CHE



WHEN it comes to heavy trucks or cars operated in hilly country—

You naturally think of Thermoid the lining with 25 to 40 per cent EXTRA MATERIAL and 40 per cent LONGER SERVICE in it.

But the lining that lasts on a heavy job, lasts longer still on light ones.

Make every job a Thermoid job.

#### THERMOID RUBBER COMPANY

Factories and Main Offices

TRENTON, N. J.

Makers of Thermoid Transmission Lining, Thermoid-Hardy Universal Joints and Mechanical Rubber Goods

Hydraulic Compressed
Brake Lining
For Short Stops and Long Service"



## What AC Means to the Dealer

#### New AC Spark Plugs



A new design, new alloy for sparking points, new electrically fused Kyanite insulator core and a new glaze.

AC Carbon-proof Plugs are also made in all sizes.

The demand for AC Spark Plugs is assured through their use as fac-

tory equipment on the following cars:

Buick
Cadillac
Case
Chandler
Chevrolet
Chrysler
Cleveland

Davis
Dodge
Brothers
Durant
Essex
Flint
Hudson Kissel Marmon

Nash Oakland Oldsmobile Paige Star Velie Westcott

New AC 1075 for Fords



The special features of the AC 1075 make it the most desirable plug for Fords. Dealers are building a big and profitable business by emphasizing these features in making sales:

- 1 Spring Terminal Clip
- 2 Heavy Body Porcelain
- 3 Hexagon of extra length permits easy and positive application of spark plug wrench
- High Temperature Fins Patented carbon-proof Porcelain
- 5 Drip electrode forms natural Oil Drain

Made in both one and two-piece design.

DEALERS who carry AC products can build a profitable business.

The demand is assured because of their use as car equipment.

They are backed by strong advertising.

AC Spark Plug Company, FLINT, Michigan

Makers of AC Spark Plugs—AC Speedometers
—AC Air Cleaners

AC-SPHINX Birmingham ENGLAND

AC-OLEO Levallois-Perret FRANCE AC Speedometers.



The Model for Fords

There is proof of the quality of AC Speedometers in the fact that they are used as original factory equipment on Buick, Cadillac, Chandler, Chevrolet, Chrysler, Gray, Oakland, Oldsmobile, Peerless and G.M.C. trucks.

The AC Speedometer for Fords is of the same quality as furnished the above manufacturers for their original factory equipment. The AC Direct Drive does away with the troublesome swivel joint and insures continuously satisfactory service.

Packed complete with all attachments.



Dust is the same as an abrasive compound and causes excessive wear on all the mo-tor's moving parts.

AC Air Cleaners are original factory equipment on the 1926 models of Nash, Buick and Oakland.

Installation is easy as it connects directly to the carburetor. Once installed it requires no attention as there are no moving parts to get out of order. Packed complete with all attachments.

Models are now ready for Chevrolet, Chrysler Four, Dodge Bros., Ford, Maxwell, Oldsmobile, Star, Studebaker, as well as the 1925 and earlier models of Buick, Nash and Oakland.



# THE MANHATTAN RUBBER MFG. COMPANY

Executive Offices and Factories: Passaic, N. J.

Branches:

Chicago Detroit New York Baltimore Birmingham Boston Cleveland Los Angeles Minneapolis New Orleans Philadelphia Pittsburgh Salt Lake City St. Louis In ten months—net profits as much as entire original capitalization—and earnings, one hundred per cent on their investment. Aren't you interested in a similar "inspiration to do business"?

Willys-Overland, Inc., Toledo, Ohio . Willys-Overland Sales Co. Ltd., Toronto, Canada.

# WILLYS ~ OVERLAND

Write Toledo for Dealer Franchise

details.

THE I. BOYD HUFFMAN MOTOR CO. DAYTON, OHIO

August 20, 1925.

Willys-Overland, Incorporated, Toledo, Ohio.

Gentlemen:

ranks of the snow been just ten months since we joined the tal, giving us one hundred per cent on our investment.

faction This, however, is not the only reason for our satiswe have enjoyed is the congenial and cooperative association with whom

bility of The Overland contract, incorporating both the making money and this helpful and pleasant relation outlook.

The Overland contract, incorporating both the possible future a very and inspiration to do business, and gives

THE I. BOYD HUFFMAN MOTOR COMPANY

IBH:CMB

(Signed) I. B. Huffman

ronto, Canada.

# Stewart-Warner

# 100% Protection

The important factors governing your success are:

First: A complete line of highest grade radios fulfilling every demand.

Second: Built and guaranteed by one of the largest and most progressive manufacturers of today.

Third: Absolute protection guaranteed by a "Dealermade" plan.

Fourth: Only one dealer in each locality.

Fifth: No jobbers.

Sixth: A large advertising program that will create an unusual demand.

Seventh: A price and style to suit every radio buyer.

Eighth: A personal service that guarantees complete radio satisfaction.



Model 400

\$25.00

Model 405 \$19.50

Model 300



Model 325 \$80.00



Model 305 \$95.00



Stewart-Warner Matched-Unit Radio offers you all of these things and more.



Model 310 \$175.00





Prices slightly higher West of the Rockies

st

e

0

# Matched-Unit Radio For The Radio Dealer

ADIO SUCCESS hinges on many things, but the greatest of all is worth while profit.

You, as a Radio dealer in your locality, in order to attain success must sell a radio set that will satisfy your customers, and at the same time prove a profitable transaction to you. Stewart-Warner has invested thousands of dollars in developing and perfecting a high-class set which you, as a dealer, will be proud to sell.

Stewart-Warner engineers have gone one step farther. They have matched each unit, the Instrument, the Tube, the Reproducer, the Accessories for perfect functioning with each other, enabling you to offer to the buying public a radio set that is unsurpassed.

You, as a dealer, are entitled to a fair profit and absolute protection. We guarantee both. Our "Dealer-Made" plan assures you every avenue to success.

There will be no bargains in Stewart-Warner Radios. They will be sold by authorized dealers only.

No individual can buy Stewart-Warner Radios at dealer's prices. He must buy from an authorized Stewart-Warner Dealer.

Stewart-Warner Matched-Unit Radios are distributed direct from our own central distribution stations. Ninety-six all over the world—sixty-two in the United States and in Canada.

Stewart-Warner Dealer Policy guarantees every dealer abso-

lute protection. You get all the profit, because there are no other dealers handling Stewart-Warner Radios in your immediate locality. No possibility of the Drug Store down the street selling the same line or some other store around the corner stepping in on a share of your profits.

In the same way you receive full benefit from the extensive advertising campaign now appearing in the National publications.

Stewart-Warner has gone into radio in a "sure-footed" way, and their success is already evident. Their name is already known from coast to coast through the high quality products now used by over ten million people, and when tied up with radio, instantly carries home the thought of another quality product.

Radio sets are today bought in much the same manner as motor cars—that is, the buyer wants to know who is back of the article he is purchasing and whether they will be in business next year or the year after.

For this reason it will be well worth your while to consider a Stewart-Warner Dealership now because next year one may not be available in your locality.

If you are a live-wire dealer, you can build up a radio business that will give you prestige, profit, protection and permanence, through our "Dealer-made" plan of radio merchandising. Send in the coupon below and we will have our representative call and explain its many advantages to you.

STEWART-WARNER SPEEDOMETER CORPORATION

CHICAGO - U.S.A.

# Steuard-Uarner Matched Unit Radio INSTRUMENTS TUBES REPRODUCERS ACCESSORIES COPYRIGHT 1925 BY S.W.S. COR'N.

Model 505 \$22,50

\$22.50 Radio Table with storage space for batteries



Radio Division Stewart-Warner Speedometer Corporation 1828 Diversey Pkwy., Chicago, U.S.A.

Gentlemen:—I want to be considered in connection with a Stewart-Warner Radio Dealership and to discuss the details with your representative.

Date\_

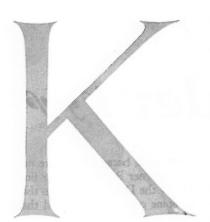
Name\_\_\_\_

Address

City\_\_\_

\_County\_

State\_







# Another Kissel PRICE REDUCTION

The Six-Cylinder
Brougham
formerly\$1795

now



The Straight Eight Brougham formerly \$2195

now

\$2005

The Six Brougham, originally priced at \$1895, then reduced to \$1795, is now down to \$1695.

The Straight Eight Brougham, first priced at \$2295, then \$2195, is now reduced to \$2095.

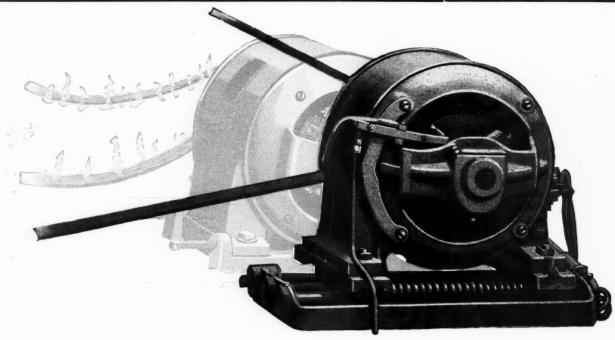
These smashing price cuts—made in the busiest season and right at the peak of Kissel's great sales increase—follow just three months after the sensational Kissel reductions that started other price changes in the industry.

The quality of the cars is the same. In fact, the quality has been improved through the addition of a new Dual Oil Purifying System, Air Cleaner and Gasoline Purifier.

Nowhere can you match Kissel value now!

KISSEL MOTOR CAR COMPANY Hartford, Wisconsin





# Good-bye Belt Trouble!

Avoid Slipping or Burning Belts With a U. S. Air Compressor

HE motor base on a U. S. Air Compressor is self-adjusting—it keeps the belt at just the right tension. And that means full power, no waste, and avoidance of belt trouble. The belt-wearing idler is eliminated, there is one third less friction - resulting in a saving of approximately 9% in current consumption.

The special U. S. base accommodates any standard motor without mechanical alteration. the Quiet Smoothness

Besides these advantages you get the benefit of all the features developed in building nothing but air compressors for tire inflation. Here are some of them:

- All four valve assemblies identical and interchange-
- U. S. Patented pressure unloader assures "no load" start and protects against burning out motor from
- Improved Copper intercooler is leakproof and has but two connections.
- Rigid piston assembly has but one connecting rod; Cylinders and Crankcase cast enbloc.
- Removable moisture reservoir collects condensation before entering tank.
- 6 All bearings liberally oversize; accessible and interchangeable.

Send for full information on U.S. Air Compressors and Air Towers.

Standard De- The United States Air Compressor Co. 5304 Harvard Ave. Cleveland, Ohio



# A Tire Chain Salesman FREE!

Here is the new McKay Metal Display Stand—a McKay Tire Chain salesman ready to work for you—without pay! One that will always be on the job when you're busy with other things! One that never fails to remind your customers of their chain needs!

Attractively finished in colors as shown above, and substantially con-

structed of metal, this stand is a good looking and valuable merchandising feature for any store. The size, approximately 25 inches high, 17 inches wide and 8½ inches deep, is ideal for display purposes. It is suitable for both counter and window use. Descriptive literature can be placed in the pockets on both sides.

UNITED STATES CHAIN & FORGING COMPANY
Union Trust Bldg., Pittsburgh, Pa.
Makers of Chains for all Industrial and Commercial Purposes

Pacific Coast Sales Representatives: NORMAN COWAN CO. 451 Rialto Bldg., San Francisco, California

#### FREE to McKay Dealers

To help you boost your chain sales and profits, the McKay Display Stand is offered to you absolutely free. Send the coupon for full details.

United States Chain & Forging Co. Union Trust Building, Pittsburgh, Pa.

I am interested in the possibilities for greater tire chain sales and profits through the use of the new display stand. Please tell me how I can get it free of cost.

Name .....

Address .....

City and State.....

M.A.10-25

proof against water:



Patents applied for. Designed and licensed by V. Van Nattan.

Fall rains and mud-winter slush and ice-these destructive agents can't get at the working mechanism of the Gemco Shock Absorber. It's sealed tight! Free from the ordinary shock absorber troubles. No servicing required. What's more, it's built on exclusive principles that result in amazing riding comfort. Let us tell you why it ranks as the greatest achievement in the shock absorber field. Write for illustrated folder and prices.

HOCK ABSOR

jeme GEMCO MFG. COMPANY, 760 South Pierce Street, Milwaukee, Wis.

viakers of America's First Automobile Bumpers

Jacobs OChuchs







The Drill "With the Pistol Grip and Trigger Switch" —a product of The Black & Decker Mfg. Co., Towson, Md.

Men who own cars today know more about them than they used to. And they know more about what service should cost.

So it's not possible to put over an excessive charge—to cover the extra hours of labor that proper equipment would have saved.

Good equipment alone makes possible good work at a moderate charge—and at a good profit.

And the first step toward good shop profits is the purchase of good Portable Electric Drills which are the most needed and most profitable of all modern service equipment.

#### THE JACOBS MANUFACTURING COMPANY

HARTFORD, CONN., U. S. A.

The World's Largest Producers of Drill Chucks



Jacobs OChucks

# 17,458,377 Motor Vehicles

Registered in the United States

July 1, 1925

Pleasure Cars, Commercial Trucks, Busses for Passenger Transportation Service—

Modern manufacturing methods made the construction of this host of cars possible; modern facilities and equipment for maintenance and repair keep it in operation.

And wherever small tools are needed Electric Portable Drills (over 90% of the best equipped with Jacobs Chucks) are invaluable. The manufacturer recognizes their usefulness—the repair man considers his electric drill, with a Jacobs Chuck on its business end, an indispensable ally.

WANAMAKER SPECIAL

The newest development in intercity transportation service, New York to Philadelphia, sponsored by the Wanamaker stores.

Symbols of Progress



PREPARED BY MACHINE

# GATES HOSE

"The Standardized Radiator Hose"



The customer who drives up with a hot engine may not know his hose connection is to blame. Radiator hose gets all the wear inside—the customer can't see the broken inside lining that is obstructing the water circulation. Tell him—and sell him the hose with the tougher rubber lining—the Gates Vulco.

Made by the World's Largest Manufacturers of Fan Belts



# Sell them Willing Found your Sell them Willing Tonts to Jorevent motor pounding

[Sales Reason No. 2]



The Winterfront automatically shuts out all air until the motor is hot. It then automatically opens to prevent the motor getting too hot. It automatically regulates the amount of air admitted through the radiator to maintain best running temperature as long as the motor is running.

Improves Carburetion.

Reduces Dilution.

Prevents Cold Feet.

There is only one Winterfront.

It is automatic.

It is made by Pines.

Standard equipment on Packard, Peerless and other high-grade

List Prices:

Large \$28.00, Medium \$25.00 Small \$22.50

Discount to Dealers

When you read the Winterfront advertisement in THE SATURDAY EVENING POST of October 24th you will see how we present this idea to your customers—

We ask: "Why Pound Your Motor to Pieces?"

It is a fact that motor cars driven in cold weather without means for regulating the air flow through the radiator soon get noisy. In a cold motor the gas condenses in the combustion chamber. This condensation carries carbon with it to the crank case. Carbon mixed with the oil makes a grinding compound which wears out the cylinders and bearings so that the motor literally pounds itself to pieces.

The cost of a single repair job would more than pay for the Winterfront. The Winterfront shuts out the cold, warming the motor quickly. It improves carburetion and reduces dilution. It saves the motor. It does this automatically.

Put on in 10 minutes. Only 4 bolts which go through the air openings in the radiator. No attachments to make to the fan, motor, dash or other part of the car.

#### PINES WINTERFRONT CO.

412 N. Sacramento Blvd.

Chicago, Ill.

Let us put you in touch with our distributor in your territory who has a complete stock for immediate delivery

# INTERFRONT

#### PINES AUTOMATIC RADIATOR SHUTTER

Use the margin and let us know what car you handle. Also name of distributor through whom you prefer to buy

Car handled

Name of Distributor....

Please sign on the margin



# Watch the Flint

- During the past two years the Flint Motor Company has been slowly and carefully building better motor cars—and building a reputation for reliable merchandise!
- There have been no forced methods of selling—no attempts to force either the public or dealers to buy, no attempt to build great volume—yet there has never been a month in the history of the Flint Motor Company that has not shown an increase in sales!
- And now, on this foundation, a progressive merchandising and advertising policy has been added, which will make dealer contracts even more attractive.

THRUMBEL

Vice President and General Manager

#### FLINT MOTOR COMPANY

FLINT, MICHIGAN

BUILDERS OF HIGH GRADE MOTOR CARS

FLINT SIX

# They Can't Laugh This Off!

At the radio show in New York only eight of the over 300 Radio Receiving Sets exhibited were equipped with Straight Line Frequency Condensers. All the rest had old style condensers, still piling up the stations on top of each other on the lower wavelengths or unable to tune any station below 250 meters.

All manufacturers of Radio Receiving Sets are desperately trying to equip with Straight Line Frequency Condensers as quickly as possible.

But in the meantime they are asking Jobbers and Dealers to dump their old, obsolete sets, equipped with old style condensers, on the unsuspecting public.

The leadership and superiority of Neutrowound is best evidenced by the fact that the other manufacturers of Radio Receiving Sets are making this desperate effort to produce radio sets which are "almost as good" as the Neutrowound, but as yet they have not succeeded in doing so.

The popularity of the Neutrowound is due to its perfect reception, extreme selectivity, ease of operation, dependability of reception, concert volume—which can be tuned to a whisper—and freedom from the usual howls, noises and distortions.

The Neutrowound is sold only through exclusive Distributors and exclusive Dealers, who are fully protected.

The large volume of orders we are receiving, which include many orders for carload shipments, indicate that during the rush season it will be absolutely impossible for us to make immediate shipment. Therefore, we suggest that you place your order immediately for a sufficient supply of Neutrowound Radio Receiving Sets to meet your requirements, in order to avoid disappointment during the rush season.

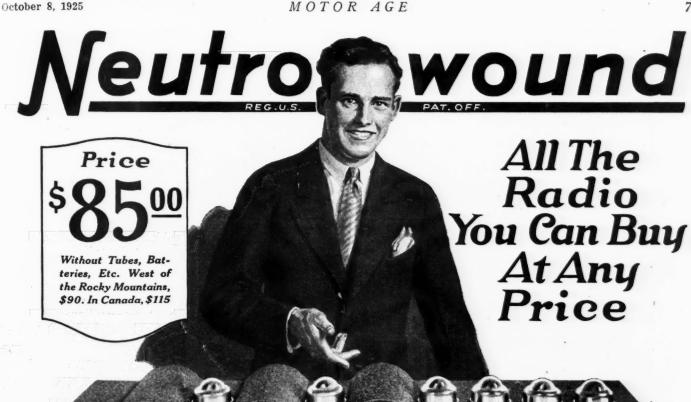
Exclusive Neutrowound Dealers are in position to offer their customers the best Radio Receiving Set manufactured in the United States today, but we wish to emphasize the fact that the demand for Neutrowound Sets is so great that all orders are now being shipped according to the date of their receipt and it will be utterly impossible for us to fill all orders received during the rush period of the radio season.

#### Neutrowound dealers are not unloading "Junk"!

When an exclusive Neutrowound Dealer sells a Neutrowound Radio Receiving Set he not only knows that he is selling the best set made—one that will give absolute satisfaction to his customers—but he also has the satisfaction of knowing that he is not unloading an old style, obsolete "weak sister", which is out of date and which cannot possibly tune the entire wave-band from 200 to 550 meters.

NEUTROWOUND RADIO MANUFACTURING COMPANY 1721 Prairie Ave., Chicago, Ill.

1925



Manufactured under our own patents and under a Reciprocal License from the Navy Department of the United States Government

# 1926 Model—with S-L-F Variable Condensers

Will Tune All Stations from 200 to 550 Meters

A Radio Receiving Set that is equipped with "oldfashioned" condensers cannot tune in stations below 250 meters and therefore, is obsolete because many of the biggest high-power stations in America broadcast below 250 meters.

Neutrowound Straight Line Frequency Condensers are designed to give absolutely straight line frequency dial calibration, preventing the piling up or the crowding of stations broadcast-

ing on low wave lengths.

There is no crowding of stations on the lower range with this method, and it is possible to tune right on down to 200 meters with ideal tuning conditions.

In the Neutrowound 6 Tube Set you will find that perfect balance between selectivity and volume, which is absolutely necessary to meet the various radio conditions—extreme selectivity and concert volume from distant stations loud enough so that your family and friends can all enjoy the programs broadcast from distant stations-yet it can be tuned to a whisper.

The Neutrowound 6 Tube Set is made in

but one model—a precision instrument of the finest quality, handsomely finished in crystalline black and nickel.

In this one model is contained all the "Radio" that it is possible to buy at any price.

## BROADCASTING STATION WOK

The Neutrowound Radio Mfg.Co. owns and operates station WOK broadcasting on 217.3 meters

#### Makes "Dull" Months Pay "Big" Profits

Perhaps you are one of the many Automotive Dealers whose profits are good during six months of the year-and very unsatisfactory during the other six months. Thousands of Automotive Dealers are in that position. Their expenses and overhead run right on every month—but their profits drop off, during the dull months.

You can, not only even up your profits for the year, by becoming a Distributor of the Neutrowound Radio Receiving Set—but can increase your profits—and make more money. Mail Coupon NOW.

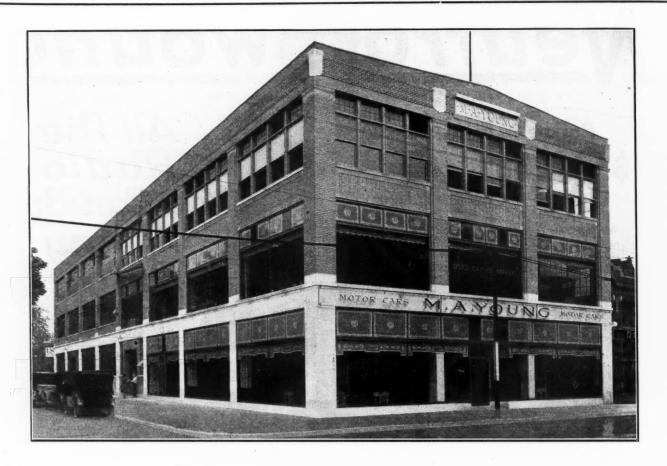
### NEUTROWOUND RADIO MFG. CO.

Radio Division: Advance Automobile Accessories Corporation 1721 Prairie Ave., Dept. 2026, Chicago, Ill.

# Dealer's Coupon

NEUTROWOUND RADIO MFG. CO. 1721 Prairie Ave., Dept. 2026, Chicago, Ill. Send complete information, Dealers' Discounts and Neutrowound Sales Plan.

Street ..... City ...... State .....



# Clear Vision Increases the Value of Your Window Display

Pedestrians and motorists passing by, look into those windows through which it is easiest to see.

It is, therefore to the advantage of every automotive merchant to display his goods in large spacious windows of modern design.

A more vivid comprehension of the value of "clear vision" can be obtained by comparing the old fashioned front with the modern

front of today. The former was merely a partition with glass in it to admit daylight, keep out the elements and act as sort of an enclosure for the crude exhibition of merchandise.

The modern front not only protects the interior from the elements but also enables progressive merchants to trim their windows in a sales producing manner.

**MODERN** 

# Kawnee Tore FRONTS

are profitably serving over a quarter million merchants.

1925



# The new Stewart 6 cylinder speed truck

A NEW six-cylinder speed truck has been added to the Stewart line—1½-to 2 ton capacity with 32 x 6 cord tires front and rear.

See this new Stewart—it sets the mark in speed truck construction for its particular capacity—a remarkable truck at a remarkable price. All truck, every inch of it designed by a company which makes nothing but trucks,—the best truck value on the American market; nothing of its size can compare with it from the standpoint of price, performance, satisfactory service.

It is dollar for dollar value all the way through and more—low first cost, low operating cost. It is easy riding, easy to handle—you cannot realize what this means until you get back of the wheel and feel it for yourself. It is a truck you will enjoy driving, enjoy owning because of its saving in gasoline, oil, tires, repairs. A truck which is good for years of hard service—you will like it better the longer you run it.

4-cylinder chassis \$1595 6-cylinder chassis \$1695

f. o. b. Buffalo plus tax

The Stewart Franchise is liberal and a moneymaker for the dealer — write for details.

# SCUTT! SMOTOR TRUCKS

STEWART MOTOR CORPORATION, BUFFALO, N. Y.

Export Branch: 90 West St., New York, N. Y. All Codes Used.

Other Capacities

1 Ton Chassis (4cyl.) \$1195 1¼ Ton Chassis (6 cyl.) \$1295

(6 cyl.) \$1295 2 Ton Chassis \$1890

\$1890 2½-3 Ton' Chassis \$2895

3½-4 Ton Chassis \$3795

f. o. b. Buffalo plus tax

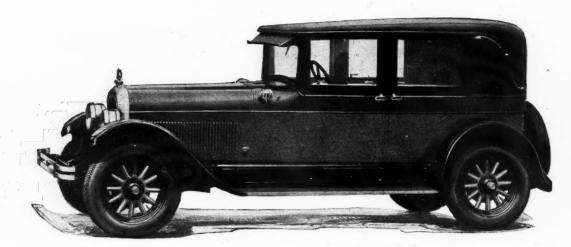
The NEER npany

nt St.

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# An Opportunity any Business Man Must Consider



# Locomobile's Popular Priced Car

In the Junior Eight Locomobile Dealers and Distributors are finding one of the fastest moving and most profitable lines in the retail or wholesale selling field.

The reputation of Locomobile has laid the ground work and 25 years of leadership has made a market that is rich and ripe.

The Junior Eight is not built to cash in on a reputation it is built to perpetuate a good name—to make it possible for thousands to enjoy Locomobile quality at a price within their reach.

This means a big opportunity for Dealers who can match Locomobile standards of business methods.

Write or wire for particulars.

LOCOMOBILE COMPANY OF AMERICA, INC. Bridgeport, Conn.

Prices f. o. b. Bridgeport, Conn.

Touring \$1785

Roadster \$2150

SEDAN \$2285 BROUGHAM \$2285



1925



# **BALLOON BUMPERS**

help sell automobiles—

they enhance beauty



# CANNON BALL BAKER

World's Champion Automobile Record Breaker, says:

"After exhaustive tests of all kinds of bumpers, I have adopted Balloon Bumpers as official equipment for my cars.

"My decision was based on three features: Protection, Endurance and Beauty.

"I have found that Balloon Bumpers remain as solid as the Rock of Gibraltar, never developing squeaks or rattles common to many other types."





TELEGRAMS, letters and large repeat orders from leading car dealers all over the United States show that Balloon Bumpers have actually helped sell thousands of automobiles this year.

Car purchasers invariably pick out cars equipped with Balloon Bumpers because Balloon Bumpers are distinctive and beautiful and add a finishing touch.

Approved by the Insurance Underwriters. Sold

exclusively to car dealers. Balloon Bumpers give trade-in margins and extra profits of over \$25.00 per car.

Try them. One set, if you wish, at quantity discount. Order now by wire collect.

Automobile
Equipment Mfg. Corp.
1908-10-12 Indiana Ave.
CHICAGO



Full Front or Rear Bumper, \$25 Balloonettes for Rear, \$30



# When Control Counts!

ICY PAVEMENT . . . slush-filled holes of unknown depth, ready to jerk the wheel from the hands of the unwary. All the essentials for a dangerous skid! But not with a Ross Cam and Lever Steering Gear. With a Ross the wheel will stay put—no matter how deep the holes. No chance for it to get away. Under every condition Ross gives ease and certainty of control.

ROSS GEAR AND TOOL COMPANY, 400 Heath Street, Lafayette, Indiana



EASIER STEERING

LESS ROAD SHOCK





LEARN "what's what" in radio from what happened in the motor field.

Look over current automobile advertising. Look into the cars themselves. You'll find that while the advertising "plays up" refinements of model and improvements in equipment, the basic appeal to the motor-car buyer is the fully arrived, settled-down, standardized chassis of the car itself.

How about the radio business? How about your sales and profits on an invention that has won immediate success through the sheer wonder of its accomplishments? The world is now ready to buy standardized radio in volume, and promises this year to bring Radio very near the top of leading national industries.

# Give a Thought to THERMIODYNE, for This is THERMIODYNE Year

THERMIODYNE'S Three-Stage Thermionic circuit is several jumps ahead of any "hookup" on the market—and it cannot be superseded by anything short of a red revolution in radio research.

THERMIODYNE'S Master Control makes it a really-truly home entertainer. For with the Master Control women and children are as much in command of the air as the "radio expert."

# Put a THERMIODYNE in Every Home!

To say that THERMIODYNE is today's outstanding example of standardized radio reception means that the THERMIODYNE purchaser of today will be a satisfied THERMIODYNE owner for years to come.

**THERMIODYNE** is as radio-staple as a Packard chassis is motor-car staple. Each is a standardized product. The purchaser of either owns something that will "stay put" and "go strong" for years to come.

When new accessories and improved equipment come along

—as come they will—there will be no worry about "obsolete models" and "discarded types" from either THERMIODYNE public or THERMIODYNE trade. For THERMIODYNE is standardized to discount the future of research and invention—and while tubes and batteries, equipment and accessories will assuredly come and go, each and all of them will "hook up" to THERMIODYNE like new friends in an old home and merely bring out better performance than ever on the same wonderful standardized THERMIODYNE radio "chassis" of 1926—and after!

# We Say This to You

THERMIODYNE'S sales policy is backed up by what we believe to be the most comprehensive, most complete and most co-operative merchandising franchise offered to responsible radio merchants in the whole radio field today. Write or wire us for illustrated literature on the full THERMIODYNE line and for information regarding exclusive Dealer Franchise, together with details on the surest and easiest ways to make radio sales—oftentimes with two profits on a single sale. DO IT TODAY! Simply say: "Send Full Information."

# This is THERMIODYNE Year

Write or wire your nearest Distributor—or us direct—TODAY—while good territory may be open to you. Tomorrow may be too late. "Do it NOW!"

Canadian Sales Offices:

Dominion Thermiodyne Radio, Ltd. 425 Phillips Place Montreal, Quebec The Famous Master Control

The Famous Master Con

"The Sensation of Radio"

THERMIODYNE
Radio Corporation
1819 Broadway
NEW YORK CITY

925

eatures that sell the new Chevrolet

> In every city, town and village where there is a Chevrolet dealer you will find Chevrolet advertising appearing consistently in the newspapers.

> The good business that Chevrolet dealers enjoy everywhere is in great measure obtained through the effective advertising support they receive as well as the easy salability of the cars they handle.

> CHEVROLET MOTOR COMPANY, DETROIT, MICHIGAN
> Division of General Motors Corporation



for Economical Transportation

QUALITY AT LOW COST

# Gardner in Kansas City Makes "A Net Profit on Every Sale,"

# 65% for August, 1925

That's the profit Tri-State Motors, Inc., made during Kansas City's poorest month. Think of it! 65% profit on total invested capital after depreciating used cars—just one month's business. That's evidence that Gardner's Policy of "A Net Profit on Every Sale—or trade-in" is right!

Gardner Factory Sales for September show a 30% gain over August—this exceeds all months since last April. More proof of Gardner's increasing popularity. Gardner Dealers have the right kind of merchandise—the kind that sells—the right kind of a contract—one page, plain English—no forced quotas—and the right kind of a discount!

There's a story full of cheer for any dealer who wants to hear it—just ask for more particulars about Gardner's policy of "A Net Profit on Every Sale—or trade-in."

THE GARDNER MOTOR CO., INC.

ST. LOUIS, U. S. A.

Gardner Assures a Net Profit on Every Sale









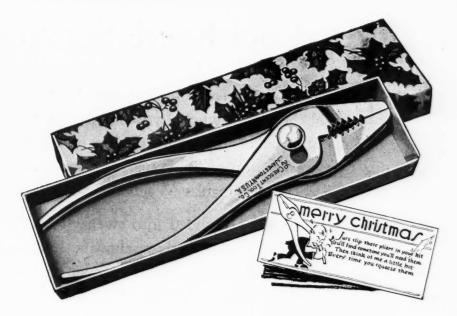
019 — the Crescent Dropforged large capacity wrench that has a hundred and one uses about house, car, or farm machinery retails at 75c. Packed in holly box with attractive card.



This Crescent Long Nose Plier is popular with radio fans, car owners, and other amateur or professional mechanics. It makes a fine Christmas gift at a popular price—75c with gift box and greeting card.



The Crescent Wrench is standard. Everyone has use for it. The gift box and lively greeting card make it a novel and interesting Christmas item. Retail—8-in., 95c.



# Lively business for accessory departments this Christmas!

ERE'S a new idea that fits the accessory department's holiday needs to a T.

In addition to packing Crescent Tools in attractive gift boxes we have made up a series of catchy, appropriate greeting cards to go with each one of the tools best suited for Christmas giving.

The 8-inch Crescent Wrench, the 019 Auto Wrench, the 6-inch Long Nose, Thin Nose, and Motor Kit Pliers, and the Crescent Kit will be packed for Christmas trade in our regular style boxes with special removable holly covers. They fit right in with regular stock after Christmas.

Order tools and cards for Christmas business through your jobber. And place your order early as this promises to be the busiest Christmas we ever had.

# CRESCENT TOOL CO.

208 Harrison St.

Jamestown, N. Y.

Originators of the Crescent Wrench

# CRESCENT TOOLS

# Wagner-Lockheed Service Franchises

THE Hydraulic Brake Company, owning and controlling the patents I of Lockheed four-wheel hydraulic brakes, has placed the servicing and distribution of replacement parts in the hands of the Wagner Electric Corporation of St. Louis. The servicing of these brakes will be handled through regular Wagner service stations.

Wagner service is divided into twenty-four territories throughout the country, and a factory representative has complete charge of his territory. He is fully empowered to render final decisions. This system eliminates all red tape and home office delays. Therefore, if you are interested in the Lockheed franchise, either write or visit the nearest of the twenty-four factory branches listed below. This coupon below makes it easy if you prefer to write.

> There are also a few service territories open for Wagner Starting-Lighting-Ignition. If you are interested our nearest branch will be glad to go into details with you.

## WAGNER ELECTRIC CORPORATION

Saint Louis, Missouri

# Wagner Service Branches:

Atlanta, Ga. 145 W. Peachtree Street Baltimore, Md. 2018 N. Charles Street Boston, Mass. 342 Newbury Street Buffalo, New York 769 Main Street Chicago, Ill. 918 S. Michigan Avenue Cincinnati, Ohio 20 East Ninth Street

1412 East 25th Street Dallas, Texas 1916 Canton Street Denver, Colo. 1633 Tremont Street Detroit, Michigan 5919 Woodward Avenue Indianapolis, Ind. 922 N. Pennsylvania St. Kansas City, Missouri 905 East 15th Street

Cleveland, Ohio

Los Angeles, Calif. 1320 S. Grand Avenue Memphis, Tenn. 1116 Union Avenue Milwaukee, Wis. 501 Broadway Minneapolis, Minn. 1310 Nicollet Avenue New York City, N. Y. 321 West 54th Street Omaha, Nebr. 2212 Harney Street Toronto, Canada, 217 Dundas Street, East

Philadelphia, Pa. 1720-26 Callowhill Street Pittsburgh, Pa. 4909 Liberty Avenue Portland, Oregon 327 Flanders Street San Francisco, Calif. 457 Ninth Street Seattle, Washington 538 First Avenue, South St. Louis, Missouri 3029 Locust Street

## Lockheed Four-Wheel Hydraulic Brakes are installed on the following cars:

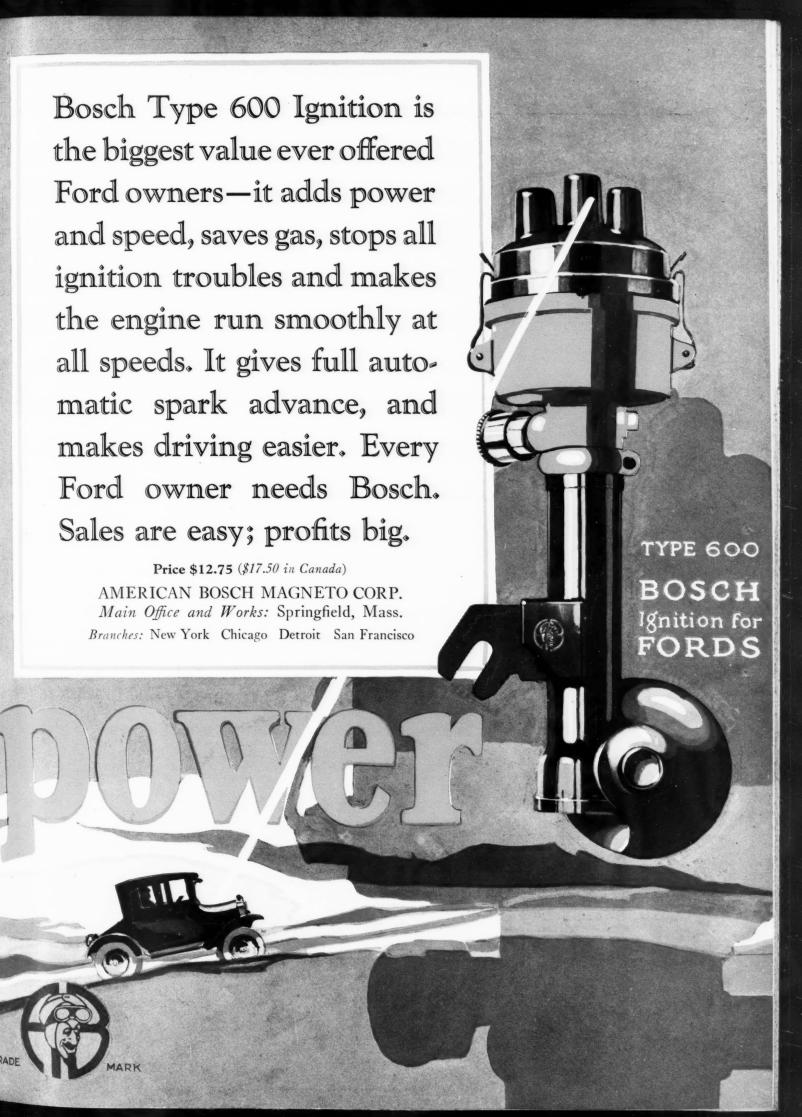
CHRYSLER SIX
CHRYSLER FOUR
HUPMOBILE EIGHT
JORDAN SIX
JORDAN EIGHT
FRONTENAC
MACFARLAN
DELLING STEAMER
STANLEY STEAMER
DAVIS
PEERLESS EIGHT
MOON

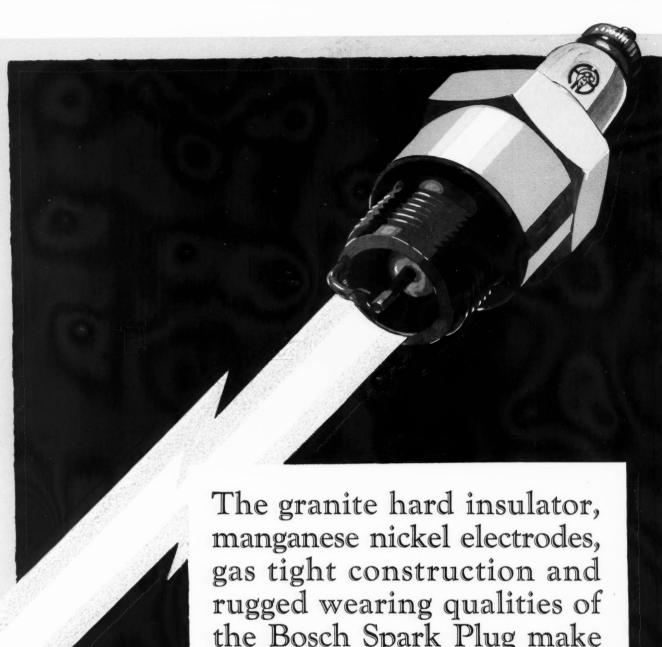
PASSENGER CARS: PASSENGER C
STEARNS
CASE
COLUMBIA
CHALMERS
ROAMER
FLINT
KISSEL
PAIGE
JEWETT
CUNNINGHAM
DUESENBERG
BALBOA
FUICKS: MORE!

HUFFMAN LEXINGTON PEERLESS SIX PEERLESS SIX STUTZ WILLS STE. CLAIRE VELIE STERLING KNIGHT WESTCOTT ELCAR DUPONT METEOR METEOR DIANA

MOTOR TRUCKS: MORELAND GARFORD The following axle companies are licensed to equip with Lockheed Hydraulic Four-Wheel Brakes: COLUMBIA SALISBURY FLINT MOTOR TIMKEN

1	WAGNER ELECTRIC CORPORATION St. Louis, Missouri	1	M	A-	14	20-	12
1	You may send me without obligation on my part, information on the following:						
	☐ Lockheed Brake Service Franchise						
	Wagner Starting-Lighting-Ignition Franchise						
1	Both Lockheed and Wagner Service Franchises						
1	Name						
1	· ·						
1	Street	•			•		*
1	CITYSTATE						





the Bosch Spark Plug make it long-lived and dependable. It's an aristocrat through and through. Sell the Bosch Spark Plug-the RED plug.

Regulars \$1.00 Ford Size 75c

AMERICAN BOSCH MAGNETO CORP., Springfield, Mass. Branches: New York, Chicago, Detroit, San Francisco

# BOSCH PLUGS

# Star Cars

# POWER SELLS IT

- N brake tests the Star develops more power. It develops more power per cubic inch of piston displacement; more power per pound of automobile; more power on grades, in sand, in mud. Measured by every test, scientific and practical, that determines power, the Star outpulls.
- Out in San Francisco, the Star Car is the only car in our knowledge that has ever climbed in any gear the celebrated "57 Hill."
- At Kingwood, West Virginia, in a hillclimbing contest with its strongest competitor, the Star won first prize.
- At Santa Fe, New Mexico, the Star won first prize in a hill-climbing contest and subsequently outpulled all competition in a sand test.
- At Freeport, Ill., in a hill-climbing competition with four other makes of cars, the Star won first place.
- At Alton Bay, N. H., Star Cars entered in a hill climb, won first and second prizes.
- At Albany, N. Y., in a hill-climbing contest staged by the Times-Union, the Star won first and second prizes.
- Outside of Bedford, Va., is a four-mile unimproved, rough, dangerous mountain road, abounding in sharp curves and reaching an elevation of 2,141 ft. above sea level. The Star is the first and only car to make this mountain grade in high speed.

- Outside of Boulder, Colo., is a hill which many cars have unsuccessfully attempted to climb, which only the Star successfully negotiated.
- In the suburbs of Baltimore is a long, steep hill on which a Star Car, without once being beaten, passed in succession, 72 other cars of various makes.
- In a contest on a long, steep grade outside of Salt Lake City, Utah, the Star Car outpulled all competition.
- The greatest factor in an automobile sale is demonstration. The strongest selling point of a demonstration is power.
- The superior power of the Star Car partly explains its fast-growing popularity. May, 1925, sales exceeded those of May, 1924, 145%; June, 1925, sales exceeded June, 1924, 145%; July, 1925, sales exceeded July, 1924, 150%; August, 1925, sales exceeded August, 1924, 161%. The superior power of the Star Car and the ease with which it may be sold as a result of that power, partly explain the remarkable influx of new Star dealers.
- Since May 1, 1925, 1,145 new dealers have enrolled under the leadership of the new management, bringing the total up to more than 3,000 and the development of the organization has only begun.
- If you would improve your profit possibilities and would learn more of the money-making opportunities afforded by this powerful fast-moving line, simply write to us.

## DURANT MOTORS, INC., BROADWAY AT 57th ST., NEW YORK CITY

General Sales Department, 1819 Broadway, New York City

Dealers and Service Stations Throughout the United States and Canada

PLANTS: ELIZABETH, N. J. LANSING, MICH. OAKLAND, CAL. TORONTO, ONT.

# Good will is the result of merit

THE growth of popularity that has so multiplied the demand for Gardner cars is a natural consequence to more than half a century of honorable service to customers and dealers alike. A service represented in products of merit, in performance that breeds enthusiasm for Gardner owners and makes friends and prospects for Gardner dealers.

Full value in every part of the car from tire to top, as a fixed policy, has naturally led to the exclusive use of Lycoming Motors.

LYCOMING MANUFACTURING COMPANY

Makers of fine Fours, Sixes and Eights-in-Line
WILLIAMSPORT :: PENNSYLVANIA

LYCOMING

Motors

Years Ahead in Automobile Motor Efficiency







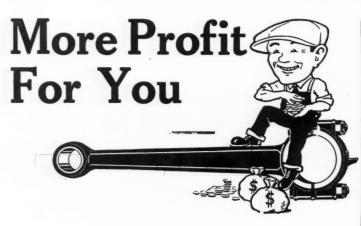
Gabriel

With any tires and any springs, on any car, there is still need for Gabriels ~~ for Gabriel free play and Gabriel increasing brak ing action are the last word in riding com

> Write today for the liberal Gabriel Sales Proposition.

The Gabriel Snubber Manufacturing Company 1415 East 40th Street, Cleveland, Ohio Toronto, Canada

Improved Balloon-Type mubbers



# And Here's How

Watkins Rebabbitted Rods are accurately machined—broached to standard crankshaft size rebuilt with laminated shims. enabling quick crankshaft fit.

A better job with lower costs.

Send your old rods to the nearest Watkins Plant.

Home Office: Wichita, Kans.

# From Stock in One Day

**NEW YORK** 

33 W. 60th St.

PORTLAND 14th & Everett St. 1628 L. St. N. W.

INDIANAPOLIS 19 W. South St.

DENVER 1818 Blake St.

HARTFORD 28 High St.

OMAHA 1006 Douglas St. CHICAGO 57-61 E. 24th St.

WASHINGTON

TOLEDO

1942 Putnam St.

SEATTLE 725 E. Pine St.

SYRACUSE 211 Wyoming St.

WICHITA

LOS ANGELES 1007 E. 9th St.

**MEMPHIS** 278 Washington St.

TORONTO, CAN. 122 Adelaide St. W.

ST. LOUIS 4216 W. Easton Ave.

CLEVELAND 5020 Euclid Ave.

WATERLOO 200 N. Waco Ave. N. E. East 4th St.

Authorized exclusively by the Buick Motor Company to rebabbitt and rebuild Buick Rods.

# Distributor Wanted

# \$15,000 to \$50,000 per Year Net Profit

One of the largest and most successful distributors of automobile accessories is looking for several new distributors in large metropolitan centers. The products are nationally advertised in a large way. They are sold by exclusive distributors, each with a defined, protected territory. Each distributor carries his own stock and does his own collecting. Some territories are showing annual net profits of \$50,000.00.

The opportunity, however, requires a seasoned, experienced man with sufficient capital to carry his own stock and accounts receivable. If you are interested and can comply with the above requirements address X. Y. Z., Motor Age. Your inquiry will be treated in confidence. All members of our organization know we are running this advertisement.



No. 389

# For rim nuts of all sizes

Take your choice of these husky, handy rim wrenches

No. 82 — The 10-inch steel sweep with smooth bends is nicely polished and nickel plated. The socket is lathe-turned from a solid steel bar. The handle, with an ebony rubber enamel finish, runs between adjustable collars. Made with 5/8, 11/16, 3/4, 13/16 and 7/8 inch sockets. Price, each, \$1.10.

No. 389—Our new patented ratchet mechanism is now used on this tool. The ratchet head is drop forged steel with the ratchet teeth broached on the inside. Hardened tool steel dogs 1½ inches long are set directly in the socket shank. The 10-inch sweep and socket are nickel plated, the rubber enameled handle runs between adjustable collars. Made with  $\frac{5}{8}$ ,  $\frac{11}{16}$ ,  $\frac{3}{4}$ ,  $\frac{13}{16}$  and  $\frac{7}{8}$  inch sockets. Price, each, \$3.50.

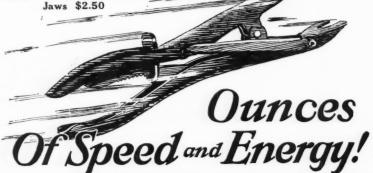
No. 692—Same as No. 389 in every particular except the socket, which is made extra-long, for removing the nuts that hold the disc wheels to the hub. Furnished with  $\frac{3}{4}$  inch socket only. Price, each, \$3.60.

Catalog No. 15 shows other good tools for service work

Write for a copy of the Goodell-Pratt Catalog, which shows all the 1500 Good Tools—many made especially for automobile service work. Catalog No. 15 is free to you.

GOODELL-PRATT COMPANY Makers of Mr. Punch GREENFIELD, MASS., U. S. A.

GOODELL-PRATT



K-D Valve Spring Lifter is the fastest tool ever made for garage

and service station—fast because it will clip a lot of time off the shop's valve grinding record. And it's energetic in the way it increases your profit on every job!

K-D is as simple as a pair of pliers—and just as handy. Stick the business end under the valve-spring washer and squeeze. The spring is lifted to the right height without slipping or binding. and stays there until you release the automatic catch, leaving both hands free to work.

Only K-D has these important features:

Universal Type With Two Extra Standard

1. Jaws remain parallel throughout entire lift.

Jaws lock automatically at any desired height, giving operator free use of both hands.
 Pressed steel all over and parkerized against rust.

Practically indestructible.

The Universal fits most L & T head motors. Special lifters for Studebaker Light Six, Peerless, Rickenbacker 8, Jordan 6 and 8, Maxwell, Dodge, Overland 6—Model 93, Chrysler, Flint 40, Fordson and overhead valve motors.

At Your Dealers or Write Us Direct

K-D MANUFACTURING COMPANY, Lancaster, Pa.



Fordson Tractor



In view of the established quality and reputation of BASLINE AUTOW-LINE, it ought to sell for more than any other line on the market. But in order to further stimulate the present large sales of this Original wire rope towline, we reduced the prices to the trade this season.

Jobbers and Dealers write today for our Price List and Descriptive Literature. Then you'll realize that you can make some real money pushing this well-known, absolutelydependable towline, the towline of exceptional proved strength.

BRODERICK & BASCOM ROPE CO., ST. LOUIS

Eastern Office and Warehouse: 76 Warren Street, New York City

# You don't find sleeping porches on theaters



The architect selects only things needed by a theater and combines them artistically to meet his client's special case.

So, too, Linde Consulting Engineers meet an industry's needs by combining a knowledge of manufacturing problems with an intimate knowledge of the oxy-acetylene process. Both are needed to make the oxyacetylene process fit smoothly into your business and become an economical part of your production.

# Consulting Engineers in the automotive industry

In the automotive industry there are many possible applications of the oxy-acetylene process. Some of them are known to your welders and others can be explained and demonstrated by the Linde service men. The most important applications, however, can become available to you only when engineered into your business by men who understand your production problems and the oxy-acetylene process as well.

Linde engineers are a part of Linde Process Service which is free to Linde users for the asking.

# THE LINDE AIR PRODUCTS CO.

General Offices: Carbide and Carbon Building, 30 E. 42d Street New York, N.Y.

37 Plants 22 District Sales Offices

91 Warehouses

# LINDE OXYGEN

YOU CAN DEPEND ON THE LINDE COMPANY



PRIMAX—a transformer that takes the place of all spark coils—has set a new standard of ignition performance.

Transformer ignition costs only a little more than present equipment, yet shows remarkable increases in power, speed, pick-up and ease of starting.

A booklet "Transformer Ignition," tells what it will mean in new profits and cus-

> tomers' good will to sell ignition with a lifetime guarantee.



Thordarson

Ignition Transformer

THORDARSON ELECTRIC MANUFACTURING CO. WORLD'S OLDEST AND LARGEST EXCLUSIVE TRANSFORMER MAKERS

Chicago, U.S.A.

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Actual Size



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In a Handy, 2-Screw-End Container

Cotter Pins in one end, Lock Washers in the other. A double screw-lid can, divided in the center by a permanent partition. Contents always separate, no danger of mixing, easily located, being container fully labeled.

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Complete line of Lock Washers and Cotter Pins in standard packages and assortments.

Ask Your Jobber for the W. W. Line.

WESTERN WIRE PRODUCTS CO. St. Louis, Mo.

Statement of the Ownership Management, Circulation, Etc., Required by the Act of Congress of August 24, 1912 MOTOR AGE.

MOTOR AGE

Chicago, Illinois

for October 1st,

published Weekly
at

Chicago, Illinois

STATE OF

CUUNTY OF

Before me, a. Notary Public.

In and for the State and County aforesaid,
personally appeared.

C. A. Musselman.

who, having been duly sworn
according to law, deposes and says that he is the.

Business Manager.

of MOTOR AGE.

In the Act of August 24, 1912, embodied in section 411, Postal Laws and
regulations, printed on the reverse of this form, to wit:

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Julian Chase.

5 S. Wabash Ave., Chicago, Ill.

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G. A. Musselman.

5 S. Wabash Ave., Chicago, Ill.

Business Manager.

G. A. Musselman.

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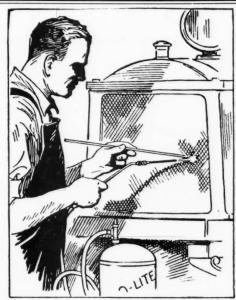
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also long and short "B"
Torch Heads;
"C" Torch Head and Soldering Iron

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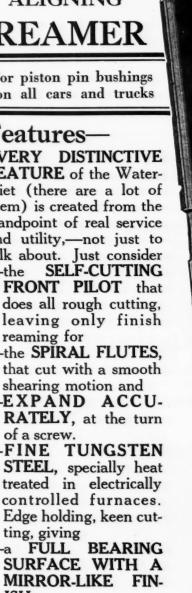
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MOTOR AGE

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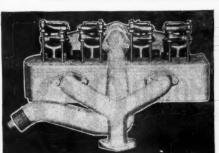


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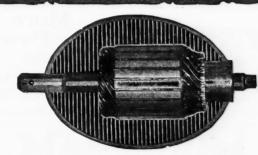
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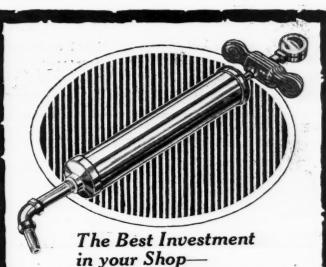


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# MOTOR

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Illinois

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NO WONDER IT SELLS!

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Ignition for FORDS

\$10.80 Including Cables and Fittings.

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Built by the oldest maker of Portable Electric Drills in the

Catalog 195 THE UNITED STATES ELECTRICAL TOOL CO. Cincinnati, Ohio. U. S. A.

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Repair Link for Broken Cross
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A Self-Closing Monkey Link attached with
fingers to loose ends of broken chain closes
and looks on first turn of wheel. Stops
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10 Links retails for 25 cents.

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Distributors wanted.

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A KLEAN-RITE Auto Laundry Franchise Is a Big Money-Maker

Write for a copy of our booklet on "The Business Possibilities of An Auto Laundry." It contains val-uable information. Sent free upon request.

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Trucks, Busses Passenger Cars

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Roughing Reamer

—for hard and crystallized valve seats. Removes hard carbon coating with a few complete turns. Cuts clean and smooth—leaves no ridges.

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New and Used Gears—Springs and Axles—Cylinders

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Lighter, stronger, and longer wearing than aluminum or Iron. Can be fitted with bronze bushings in the wrist pin holes same as in iron pistons. Dowmetal has no permanent growth. The expansion is little more than Iron.

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LAMMERT & MANN CO.
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Every Automobile dealer— Every Accessory store—Every Garage and Service station— Every Battery station—Every Gas and Oil station—can make money displaying and using Key Graphite Paste.

It has so many valuable uses that the entire trade benefits both in selling and using it. Send for the sample can and try it out. You'll be glad to know so great a utility.

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Seals all gaskets and screw thread connections.

Prevents sulphate corrosion on battery terminals.

Makes leak-proof hose connections.

On spark plug threads.

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Manifold paint.

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# KEY BOILER EQUIPMENT CO.

27TH AND McCASLAND AVENUE EAST ST. LOUIS, ILL.

# 10¢ gets a Big Sample-

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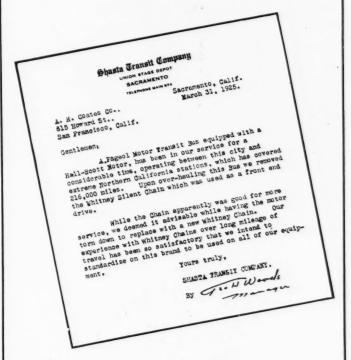
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"—good for more service—" reads this user's letter in reporting a run of 216,000 miles.



We are justly proud of such records of "long mileage of travel."

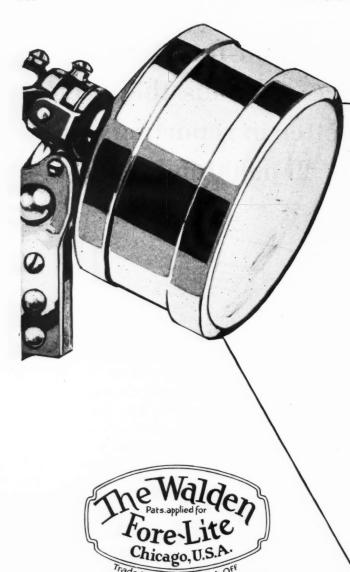
THE WHITNEY MFG. CO. HARTFORD, CONN.

Are you interested in a distributor's proposition?

If so, write us at once.

Some good territory still open.





Mounted Ahead of the Radiator Controlled from Instrument Board

# Inc List Price Makes-Walden Fore-Lite Sales Pay

The list price of the Walden Fore-Lite is higher than that of almost any other driving light in the world—and it doesn't make the least bit of difference to owners who want to buy it.

However, it does make a great deal of difference to jobbers and dealers who want to sell it. The profits on the Walden Fore-Lite amount to something worth while—

# And There Are Plenty of Sales

The Walden Fore-Lite is popular—and right from the start an easy seller—because it answers a definite demand for which no satisfactory substitute has ever been devised.

Mounted below the level of the radiator—near the road where it's wanted—it gives a driving light that cuts the dark.

Controlled from the instrument board, it can be directed to any position, where it stays, steady and sure, until the driver desires to move it.

Walden sales are going big. Jobbers, dealers and distributors are rapidly signing up. Literature and complete details will be sent you for the asking.

Walden profits are worth while.

# THE WALDEN COMPANY

1114 S. Michigan Ave.

Chicago

# WILLIAMS ACCELERATORS for FORD CARS

# Tit the new Tords without change in design, installation or performance



Just as Williams Accelerators have earned the reputation of being the finest Ford foot throttles on more than two million Ford cars—

So will they continue to offer jobber, dealer and consumer greatest value and service per dollar on the new model Fords.

The Williams Accelerator (Junior Model) fits the new model Fords without change of any kind.

The Williams Accelerator (Senior Model) is provided with an extension adapter, and installation is made in the usual manner.

Dealers: Your jobber will supply you with extension adapters without cost for use with Senior Model Williams Accelerators you have in stock.

WILLIAMS BROS. AIRCRAFT CORP. 25th and Potrero Avenue, San Francisco, California



WILLIAMS AUTOMOTIVE PRODUCTS

"SENIOR" MODEL \$2.50

JUNIOR" MODEL \$1.50



# The Kit does the work— you get the profit



Your customers know this emblem. Itsays to them: "Here's the place to buy good lamps." It is furnished free as a window transparency or as an easel-backed counter card. Ask for them. They identify you.

YOUR CUSTOMERS know the importance of their auto lamps and they know the wisdom of carrying spares. Five spare lamps, one for every socket on the car, all packed in a tidy container, is a convincing sales argument in itself.

Put the novel counter Kit display on your counter and watch it work for you. It has proved its efficiency to everyone who has used it. You pay only for the lamps. The complete display and the 20 Kits are free. And the Kits come to you already packed with the right lamps.

For the counter Kit display, the emblem of the Edison MAZDA Auto Lamp dealer and many other sales helps, write to your jobber or communicate direct with the Edison Lamp Works of General Electric Company, Harrison, N.J.

# EDISON MAZDA LAMPS



# MOTORAGE

Vol. XLVIII Number 16 PUBLISHED WEEKLY AT 5 SOUTH WABASH AVENUE CHICAGO, OCTOBER 15, 1925.

Thirty-five Cents a Copy
Three Dollars a Year

Something happened in the motor car industry when Jordan produced the Line Eight Sedan at \$1845 and the Playboy at \$1695.

Watch and you'll see.

# Smiling Service Station Is Making Money

If they were not, they could not afford such a fine layout of electric tools—And if they did not have a fine layout of electric tools, perhaps they would not be making money.

THEY BUY THEIR

# BLACK & DECKER

EQUIPMENT FROM A JOBBER



Two main facts stand out the Smiling Service Station is one of the "Well Equipped Shops Which Get the Business" and they purchase their equipment from an Automotive Jobber.

This is the history of thousands of successful Service Stations. In many respects the Jobber is a safer buying Agent than the individual, because the Jobber has the benefit of the experience of all of his customers with various lines, whereas the individual has to "take a chance." The Automotive Jobber cannot afford to sell anything but good equipment or he will soon lose the confidence of his customers.

YOUR ATTENTION IS CALLED TO THE SPLENDID ELECTRIC TOOL EQUIPMENT IN THE SMILING SERVICE STATION, ALL OF WHICH IS BLACK & DECKER OF COURSE

THE BLACK & DECKER MFG. CO.

TOWSON, MARYLAND

When Cars or Light Trucks are disabled...

MODERN garage service means towing service, too.
No profits are so great from such a small investment as a Weaver Ambulance requires.

The Model C is made especially for towing cars and light trucks. With it, one man alone can manage a wrecking job that would ordinarily take several.

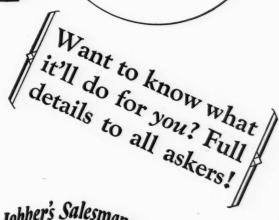
The heavy telescoping tongue—made detachable—the husky bearings and wheels—the wide clearance of supports—the flexibility of use on either axle of the crippled car—are just a few features exclusive with Weaver Ambulances.

Thick solid rubber tires or rugged cast steel wheels—whichever you prefer. A builder of business, reputation and profit for any good garage.

WEAVER

**AUTO AMBULANCE** 

MODEL C



Ask your Jobber's Salesman he's a WEAVER salesman too!

WEAVER MANUFACTURING COMPANY

Springfield, Illinois, U. S. A.

Weaver Canadian Company, Ltd., Chatham, Ontario

ADV. PICARD-SOHN, INC., N. W.

You'd never think that piston rings could make such a difference

#### INDIANA PISTON RING COMPANY

J. H. TEETOR, President C. N. TEETOR, Vice-President and General Manager HAGERSTOWN, INDIANA, U.S.A.

Export Sales Department, 549 West Washington St., Chicago, Ill.

OIL-REGULATING TYPE, 60c and up (One to a Piston)

COMPRESSION TYPE\*, 30c and up

\*For best results, always use PERFECT CIRCLE Compression rings in combination with the PERFECT CIRCLE Oil-Regulating ring.

The Circle Perfect Circle

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Jordan 8 Nash 131

Pierce-Arrow Rollin

Flint 6-40 Reo 6 Moon Series A and Newport

TEETOR Perfect

Circle **PISTON RINGS** 

For valuable piston ring data fill in name and address on margin. Indicate whether Repairman 🖂 Car Dealer 🗀 or Supply Store. 🖯 Mail today.

# MOTOR AGE

Vol. XLVIII

No. 16

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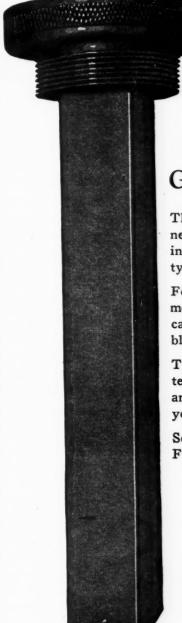
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Entered as Second Class Matter, Sept. 19, 1899, at the Post Office at
Chicago, Ill., under Act of March 6, 1879

# for the NEW FORDS



order TYPE "H" TASCO

# Gasoline Gauge

This new Type "H" fits the new 1926 Roadster, Touring, Coupe, and Tudor. Old type "C" fits the Fordor.

Ford buyers will want them more than ever on these new cars as it is almost impossible to use a measuring stick.

TASCO gauge is guaranteed for the life of the car and there's a good profit for you in every sale.

Sell one for every New Ford you see.

Sell Quick at

\$1.25

Retail!

Order some of the new Type "H" today.

The Akron-Selle Co.

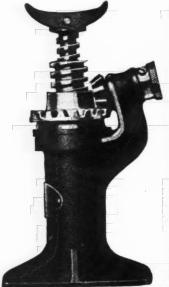
"40 Years in Business"

Akron, Ohio



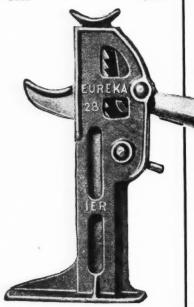
More People Use TASCO Gauges ~ than any other kind. Look for this Dial

FORDS, CHEVROLETS AND OVERLANDS



**EUREKA No. 32** 

EUREKA No. 32
Special Balloon Tire Jack
Low placement—high lift. Every part
designed especially for balloon tire
service. Double machine cut screw of
high carbon steel. Fast and easy to
operate. Equipped with 36 inch collapsible steel handle positively locked
in action. Adjustment, 7 to 17 inches.
Capacity, 3,000 pounds. Weight, 8½
pounds. Packed in individual cartons.
Price \$5.75



EUREKA No. 28 A husky ratchet type jack. Lifting pawls are heavy and spring mechanism simple. Adjustment, 8 to 16½ inches. Capacity, 2,000 pounds. Weight, 4½ pounds.

Price \$2.25

# Who makes

THEN a jobber or dealer considers handling a line, of course he asks: "What is it?"

But the question of even more importance to him is: "Who makes it?"

A good pump is a good pump—a good jack is but a good jack, after all.

But when it comes to handling them, expecting to build a decent trade in them, make money and friends with them, and get real lasting satisfaction out of your relationship with them—the organization that makes them is the vital thing.

Back of every Eureka-Fostoria Jack or Pump is the integrity of the Fostoria Pressed Steel Company—a house whose reputation for quality of product and squareness of policy is known to the entire

automotive trade. In taking over the manufacture and distribution of the Eureka-Fostoria line, we offer to jobber and dealer a money-making line that is a substantial one - and a policy that protects you.

Write for details.

# THE FOSTORIA PRESSED STEEL COMPANY

(Successors to the Ashland Mfg. Co., Ashland, Ohio)

FOSTORIA, OHIO U.S.A.

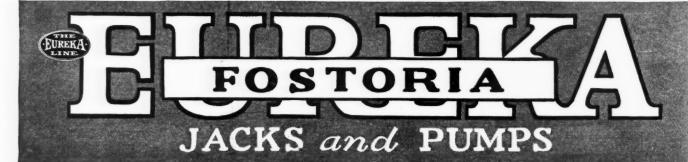
Also manufacturers of the famous Fostoria Fenders



A powerful pump. 1½ inch diameter with 18 inch barrel. Five ply rubber hose 24 inch long with "Han-D Slip-On" connection. Baked maroon



Sturdy little screw type jack for Ford, Chevrolet, Overland particularly. Capacity, 2,000 pounds. Weight, 4 pounds. Price \$1.40



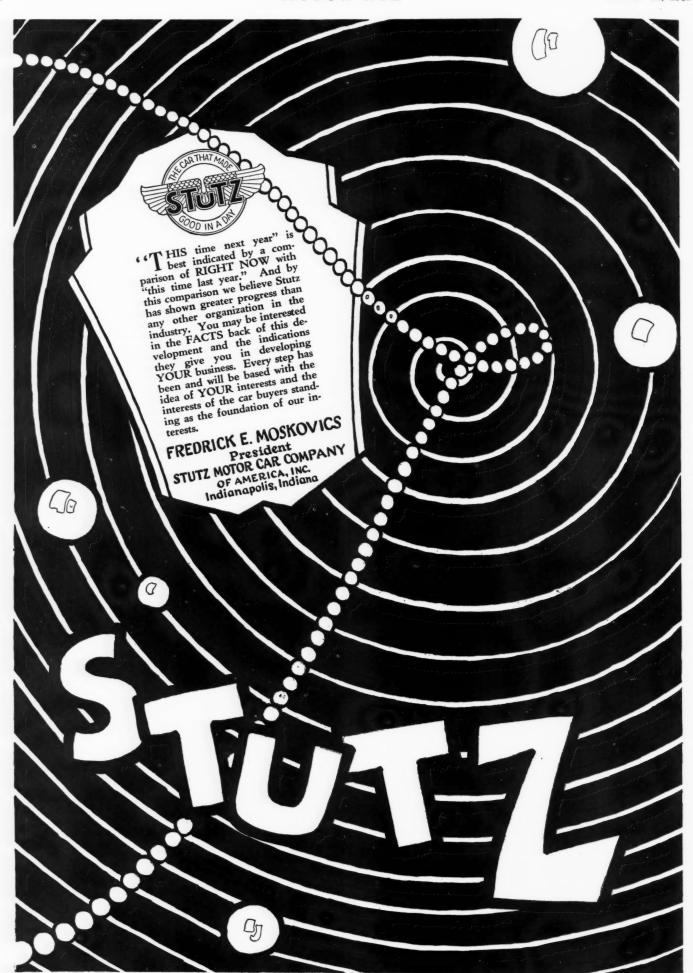


This symbol means that Studebaker prices do not include the profits of outside body-makers

THE Studebaker franchise offers more than merely "a good line of cars." It offers the invaluable backing of such policies as One-Profit Manufacture, No Yearly Models and the Used Car Pledge. These policies have proven intensely practical and instantly profitable.

THE STUDEBAKER CORPORATION
OF AMERICA
SOUTH BEND, INDIANA

THIS IS A STUDEBAKER YEAR



# Dainty Little Woman Drives

A Rochester Chauffeuse

The delights of a trip in an automobile are not familiar to everyone as mobile are not familiar to everyone as some fascination of such a trip lingers as long for chicago, few women have yet learned or Chicago, few women have yet learned in the cities named it is quite the fad in the cities named it is quite the cities named in the

From the News of April 12, 1900

In 1900 one dainty little woman in the big city fearlessly drove her automobile. In 1925 women everywhere buy automobiles for the femiles or "cally" the

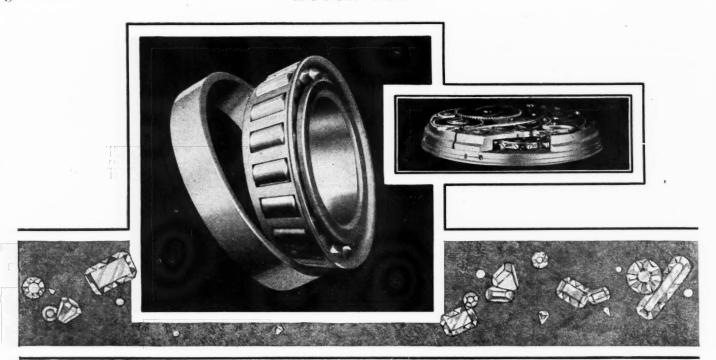
mobiles for the family, or "sell" the family on particular cars.

They may not always know what makes it go, but advertising has made them keenly conscious of who should be in the car's make-up. How they recognize great names like Timken! Saying "Timken-equipped" inspires confidence in everything else you say, not only because of the printed advertising of Timken Bearings, but because 125,000,000 Timken Bearings are in successful use, and because 83% of all motor vehicle makers use Timkens.

Dealers in Timken-equipped automobiles sell most of the cars by far.

THE TIMKEN ROLLER BEARING CO., CANTON, OHIO

TIMKEN
Tapered
ROLLER BEARINGS



# BOCK BEARINGS THE "JEWELS" OF YOUR CAR

SINCE the commencement of this series of advertisements comparing Bock Bearings to the jewels of a fine watch, a prominent watch manufacturer has published a two page advertisement in a great national magazine, featuring the part jewels play in the perfect movement of his watch.

"A fine jewel can receive friction without wear for years," he points out. And that is just where we get the comparison that forms the subject of this series. Bock Taper Roller Bearings are so free from friction, due to their ball head roller design and accurate workmanship, they endure for years in the intensely severe service of the motor car without noticeable wear.

Here the comparison ceases, for while the watchmaker's single problem in jewels is freedom from friction and wear, the motor car manufacturer in selecting bearings has to consider load carrying capacity as well.

The movement of a watch is constant, but the motor car jumps from 10 to 60 miles an hour in a few seconds, turns sharp corners that throw an enormous additional load temporarily on the wheel bearings, and pounds over rough roads that subject the bearings to continual sledge-hammer blows.

The taper roller principle as applied in Bock Bearings provides this extra capacity for every emergency. Bock Taper Rollers are the bearings that are built to outlive the car.

THE BOCK BEARING COMPANY . TOLEDO, OHIO

BOCK TAPER ROLLERS

eyor to you was a your or to you work on the your or to your or your